Tsez Syntax: A Description

Maria Polinsky
Harvard University
Polinsky@fas.harvard.edu

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Foreword

This description of Tsez syntax was created as part of the volume "A Grammar of Tsez" prepared by Bernard Comrie and myself. Because this work is still a draft, chapters are not numbered, and each chapter has its own example numbering. I will be grateful for comments, criticisms, and suggestions.

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Abbreviations

Interlinear morpheme-by-morpheme glosses follow the Leipzig Glossing Rules (http://www.eva.mpg.de/lingua/resources/glossingrules.php).

Additional abbreviations, not present in the Leipzig list:

ATTR—attributive form
EXCL—exclamative particle
HYP—hypothetical particle
IND.EVID—indirect evidence
IR—indexical reading
OBL—oblique form (a free-standing form)
OS—oblique stem
SR—shifted reading
UNCERT—particle of uncertainty
VAL—validator particle

Complex glosses consist of two or more simple glosses, divided by a dot, e.g., PST.WIT.NEG 'Witnessed past negative'.

Gender classes are indicated by Roman numerals, with genders I-IV distinguished in the singular, and IPL and nIPL distinguished in the plural. For nouns in absolutive, we indicate gender after the case gloss, e.g., ABS.III 'Gender III, absolutive'. For those noun phrases whose gender may vary and is determined contextually, it is shown in parentheses, e.g., ABS(.II).

Compound lexical items are presented with the = sign, for example, *muži=q'ʕuri* 'bedding', *gaga=cagari-* 'be smooth, even'.

Contents

Part 1: Phrases
- Nouns
- Nominalizations
- Predicates
- Attributives
- Adverbials and postpositions

Part 2: Clauses
- Basic clause types
- Interrogatives
- Exclamatives

Part 3: Sentences
- Complement clauses
- Relative clauses
- Adverbial clauses
- Clausal coordination: The linking of finite clauses

Part 4: Clause level phenomena
- Agreement
- Reflexives and anaphora
- Particles
- Word order and information structure

Part 1: Phrases

Nouns
Nominalizations
Predicates
Attributives
Adverbials and postpositions

Noun Phrase

1 General remarks

A noun phrase can be expressed by a pronoun, by a head noun preceded optionally by various modifiers, or by one of a number of nominalized verb phrase structures. The latter are discussed in the chapters on nominalizations and complement clauses. Noun phrases can occur in argument positions or they can serve as complements to postpositions—the latter are discussed in the chapter on adverbial and postpositional phrases. Predicate nominals are discussed in the chapter on predicate phrase.

Some examples of noun phrases are given below. Example (1) illustrates pronouns in the noun phrase position:

(1) a. Di-q q’ˢanoquno ƛeb (yoł).
1SG-POSS.ESS forty year be.PRS
‘I am forty years old.’

b. Eli sadaq b-ik’-ān.
IPL.ABS.(IPL)together IPL-go-FUT.DEF
‘We will go together.’

Tsez does not have third person pronouns; the language uses demonstratives in this function. An example containing two noun phrases expressed by demonstratives is given below:

(2) Žed-ä yiła č’aq’ˢir-no.
DEM.IPL-ERG DEM.nI.ABS kill-PST.nWIT
‘They killed it.’ (of an animal)

The following example has two full noun phrases, both with modifiers:

(3) Dä-z ɣˢway-ä yisi uži ħan-si.
1SG-GEN2 dog-ERG DEM.I boy.ABS.I bite-PST.WIT
‘My dog bit this boy.’

NPs can also be expressed by a substantivized adjective (4), participle (5), demonstrative (6), numeral (7), or deverbal noun (8):

(4) B-ˢeɣa-t’a-ni-z-ä b-ˢeže-t’a-ni-za-s ħurmat
IPL-young-DISTR-DEF- PL.OS-ERG IPL-old-DISTR-DEF- PL.OS-GEN1 respect.ABS.III
b-oy-x.
III-do-PRS
‘The young respect the old.’

(5) Ø-āy-ru-n-ä magalu eser-si.
I-come-PST.PTCP-DEF-ERG bread.ABS.III ask-PST.WIT
‘The one who came asked for bread.’

(6) a. Heme-z-ä sis kaɣat y-is-si.
DEM-PL.OS-ERG one letter.ABS.II II-take-PST.WIT
'They (those) received one letter.'
b. Yizi-ra-bi huni-x b-oq-xo.
DEM-PL.OS-PL.ABS.IPL road-AD.ESS IPL-become-PRS
'They get on their way.' (Ražbadinno, Tawadin: 5)

(7) Sida-q micxir zow-s.
one-POSS.ESS money.ABS.III be-PST.WIT
'One person (lit. one) had money.'

(8) Bˢeƛ'-e-z bˢabˢa-n-ä eli b-iz-ir-si.
sheep-OS-GEN2 bleat-DVB-ERG 1PL.ABS.IPL IPL-rise-CAUS-PST.WIT
'The sheep's bleating woke us up.'

Nominalized verb phrases in NP positions are illustrated below. Example (9) shows a nominalized clause in the absolutive position, and example (10) shows a masdar clause in the sub-ablative form.

(9) [Eni-y-ä kid becizi y-āy-ru-łi] elu-r r-iy-x.
mother-OS-ERG girl.ABS.II praise II-do-PST.PTCP-NMLZ.ABS.IV 1PL-LAT IV-know-PRS
'We know that Mother praised the girl.'

(10) [Debe-r neƛ-ani]-ƛ-äy r-aħir-x-ānu reƛ.
2SG-LAT give-MASD-SUB-ABL IV-boil-PRS-NEG meat.ABS.IV
'I am not boiling the meat just to give it to you.' (based on Imnajšvili 1963:237)

2 Generic noun phrases

Tsez does not have determiners; the meaning of definiteness or specificity is conveyed by several other means, including definiteness marking on noun-modifying adjectives or participles (discussed in section 3.3 below), word order, and the use of demonstratives (see section 4.1 below). Generic noun phrases do not differ in form from non-generic ones. Generic forms of mass nouns appear in the singular:

(11) Mesed xiriyaw (yoł).
gold.ABS.III expensive be.PRS
'Gold is expensive.'

If a mass noun is used in the plural form, that form refers to kinds:

(12) Elu-s bat'=bat'iyaw akri-bi (yoł).
IPL-GEN1 various cheese-PL.ABS.nIPL be.PRS
'We have different kinds of cheeses.'

Generic forms of count nouns usually appear in the plural:

(13) a. Bibidoqudi-bi r-exu-s.
dinosaur-PL.ABS.nIPL nIPL-die-PST.WIT
'Dinosaurs are extinct (lit.: died).'
b. Bibidoqudi-bi ānu.
dinosaur-PL.ABS.nIPL be.PRS.NEG
'Dinosaurs are extinct (lit.: do not exist).'

The generic reading is often suppressed in nouns that appear post-verbally, at the right periphery of the clause, as that position is associated with topichood. Compare (13a) to (14), which does not have a generic reading:

(14) R-exu-s bibidoqudi-bi.
nIPL-die-PST.WIT dinosaur-PL.ABS.nIPL
"As for dinosaurs, they died out."
#'Dinosaurs are extinct.'

As long as the noun phrase appears preverbally, the generic reading can be associated with any case form; compare the generic genitive in (15) and lative/absolutive in (16):

(15) K'et'u-s uyno k'onč'u (yoł).
cat-GEN1 four leg.ABS.III be.PRS
'A cat has four legs.'
(16) Xex-zā-r maroženi r-eti-x.
child-PL.OS-LAT ice cream.ABS.IV IV-like-PRS
'Children like/want ice-cream.'

Noun phrases in Tsez are strictly head final, and many of the concepts conveyed by post-nominal PPs in languages such as English are expressed by prenominal modifiers, most commonly genitives and relative clauses (for the latter, see the chapter on relative clauses).

In what follows, we will first discuss noun modification by adjectives, demonstratives, and numerals, then turn to quantifiers and measure phrases, and lastly to NPs containing genitive expressions. The order of elements in the noun phrase is addressed in section 9.

3 Agreement and concord in the noun phrase

3.1 Case concord

Many (not all) modifiers show case concord with the head noun; the distinction is between the direct form, used with the head noun in the absolutive case, and the oblique form, used elsewhere.[1] Modifiers that have two distinct forms include attributives with the suffix *–si* (oblique suffix *–zo*); numerals; a subset of demonstratives (section 4.1); and adnominal genitives

[1] We will be referring to this formal contrast as "direct vs. oblique"; we mark only the oblique form explicitly in the glosses.

(direct form genitive 1 in -*s*, and oblique form genitive 2 in -*z*, discussed in section 5).[2] The examples below show case concord on an adjective, a demonstrative, a numeral, and an adnominal genitive. More examples will appear in the individual sections.

(17) a. sasaqo-si/ža zaman
morning-ATTR/DEM time.ABS.III
'morning time/that time'

b. sasaqo-zo/neł zaman-a-ł
morning-ATTR.OS/DEM.nI.OS time-OS-CONT.ESS
'in the morning time/at that time'

(18) a. oč'ino otaxi
nine room.ABS.IV
'nine rooms'

b. oč'ira otax-ā
nine.OSroom-IN.ESS
'in nine rooms'

(19) a. ʕaƛo-s xalq'i
village-GEN1 people.ABS.IPL
'villagers' (lit.: village's people)

b. ʕaƛo-z xalq'i-mo-r
village-GEN2 people-OS-LAT
'to (the) villagers'

3.2 Agreement in the noun phrase

Not all adjectival modifiers register agreement with the head noun; in that regard this category is similar to verbs which also include just a subset of agreeing forms. Those adjectival modifiers that have a prefixal agreement slot show obligatory agreement with the head noun in gender, distinguishing four genders in the singular and two in the plural. The agreement prefixes on adjectives are the same as the agreement prefixes on verbs (see also chapter "Agreement"). For example:

(20) a. Ø-exora žek'u
I-tall person.ABS.I
'a tall person/man'

b. y-exora ɣˤanabi
II-tall woman.ABS.II
'a tall woman'

c. b-exora got'i
III-tall haystack.ABS.III
'a high haystack'

d. r-exora ɣun
IV-tall tree.ABS.IV

[2] The attributive suffix distinction *si/zo* and the genitive suffix distinction *s/z* (discussed in section 5 below) are presumably related, at least etymologically, although the relationship between them does not precisely match any synchronically valid morphophonemic rule.

‘a tall tree’

e. b-exora uži-bi
IPL-tall boy-PL.ABS.IPL
‘tall boys’

f. r-exora gulu-bi
nIPL-tall horse-PL.ABS.nIPL
‘tall horses’

Case concord with the head noun is marked only on those attributive modifiers that are derived with the suffix *–si*. Compare the invariant use of a regular adjective (*ixiw*) in (21) and a definite adjective (with *–ni)* in (22) with the direct–oblique contrast in (23):

(21) a. Sis ixiw cey b-ay-n.
one big eagle.ABS.III III-come-PST.nWIT
‘A big eagle flew in.’ (Yizałäy hič’č’a ixiw šebi yoł?:2)

b. Ixiw t’ek-zo šila-z-ä eqer-no.
big billy.goat-GEN2 horn-PL.OS-IN.ESS put-PST.nWIT
‘(The eagle) put (it) between the horns of a big billy goat.’
(Yizałäy hič’č’a ixiw šebi yoł?:3)

(22) Tuturu-ni xex-z-ä y-ˁeže-ni eniw q’ʷaridi y-oy-x.
naughty-DEF child-OS-ERG II-old-DEF mother.ABS.II sad II-do-PRS
‘The naughty children have upset the grandmother.’

(23) Q’ˁuq’ˁuta-zo palatenc-ä q’ˁuq’ˁuta-si reƛ’a-bi bac’ad
dirty-ATTR.OS towel-ERG dirty-ATTR hand-PL.ABS.nIPL clean
r-äd-inč’i.
nIPL-do.FUT-NEG
‘A dirty towel will not make dirty hands clean.’

Some demonstratives agree with the head noun in gender, but only distinguish gender I from the rest of the genders (nI), in both the singular and the plural. The agreeing demonstratives maintain the same I/nI gender distinction when they are used as noun phrases, most often in the function of a third person pronoun—consider example (2) above. For further details, see chapter “Agreement”.

4 Expression of definiteness on adjectival and participial modifiers

Definiteness can be expressed by the suffix *–ni* on any attributive modifier, be it a relative clause, an adjective, or an attributive noun/noun phrase modifying a noun with a unique, definite, or familiar interpretation. Definite marking is illustrated in (24) and (25) for a relative clause, in (26) for an adjective, and in (27) for a locative expression used as a dependent.[3]

(24) Ø-ik’i-xo-si-ni uži
I-go-PRS-ATTR-DEF boy
‘the boy who is going (e.g. as opposed to others)’

[3] Attributive forms that register case concord still show concord when the suffix *–ni* follows the attributive suffix (as in (24) and (27)).

(25) sis-tow sis yäł-ru*(-ni) esiw
one-FOC one be.PRS-PST.PTCP-DEF sibling.ABS.I/II
'the only sister/brother'

(26) bercinaw-ni γˢutku
beautiful-DEF house
'the beautiful house (e.g. as opposed to others)'

(27) ƛ'ˢā-ƛ'o-si-ni uži
roof-SUPER.ESS-ATTR-DEF boy
'the boy on the roof (e.g. as opposed to others)'

Definite marking is preferred once a referent has been introduced, especially in contexts of contrast. Consider the following examples. In (28) and (29), the referent is first introduced as a noun phrase with an indefinite adjective and subsequently referred to with a noun phrase containing a definite adjective. The head noun can be omitted if it is modified by a definite adjective, as shown below; such omissions are quite common in texts and spontaneous speech.

(28) Dä-r b-ukay-s sis b-ˢeže(*-ni) is.
1SG-LAT III-see-PST.WIT one III-big-DEF ox.ABS.III
Ža b-eˢže*(-ni) (is) ɣun-o-x-aɣor b-ik'i-s.
DEM III-big-DEF ox.ABS.III tree-OS-AD-ALL III-go-PST.WIT
'I saw a big ox. The big ox/the big one went toward a tree.'
(based on Imnajšvili 1963: 71)

(29) Dey c'uda heneš-no ičiw heneš-no zow-s.
1SG.GEN1 red apple.ABS.III-and green apple.ABS.III-and be-PST.WIT
Neła-r c'uda-ni (heneš) gurow b-et-inč'u.
DEM.nI-LAT red-DEF apple.ABS.III except III-want-PST.WIT.NEG
'I had a red and a green apple. She only wanted the red one.'

(30) Žoy-ä ɣun-o-qo-si aluk'a-ni-n c'uda-ni-n
lad-ERG tree-OS-POSS.ESS-ATTR white-DEF-and red-DEF-and
heneš-no b-ut'i-n.
apple.ABS.III-and III-collect-PST.nWIT
'The young man plucked the white one and the red apple from the tree.' (Xanes łˢono užin, sis kidno:76)

In the following example, the context implies that there are only two rams; the first one is introduced by the indefinite *sis* 'one', and the other noun phrase is marked for definiteness:

(31) Sis aluk'a side-ni qˢaba miƛ'-bi r-iħanay-xosi
one white one-DEF black ram-PL.ABS.nIPL nIPL-fight-PRS.PTCP
yoł.
AUX.PRS
'Two rams, one white, the other black, are fighting.' (ʕAliqilič:116)

Definite marking also appears in non-specific definite noun phrases ('such an X'), where the attributive form is modified by 'such':

(32) Hemece b-ihayaw-ni sual-yo-r žawab
such III-simple-DEF question-OS-LAT answer.ABS.III
b-iqi-nč'ey mi.
III-catch-PST.NEG 2SG.ERG
'You could not answer such a simple question.' (lit.: did not get an answer to such a simple question) (ʕAq'ilawni kid:11)

Definite modifiers are used in discourse-linked wh-phrases with the overall interpretation 'which X'. Indefinite modifiers are judged marginal in such expressions:

(33) Didiw b-igu-ni/??b-igu kamanda b-eti-x-ä debe-r?
which IPL-good-DEF/IPL-good team.ABS.IPL IPL-like-PRS-INTERR 2SG-LAT
'Which strong team do you like?'

Definite modifiers are also used in forms of address, which appear in the absolutive:

(34) dey Ø-igu-ni uži…
1SG.GEN I-good-DEF boy.ABS.I
'my good boy/my dear son…'
(35) hudu, xiriyaw-ni…
yes dear/expensive-DEF
'yes, my dear'

As examples (28) and (29) indicate, the marking of definiteness on the adjectival modifier is independent of whether or not a demonstrative is present in the noun phrase.

Some examples with definiteness marked on modifiers appeared earlier in this chapter; consider nominalized adjectives with the definite marker in (4), (5), and definite adjectives in (44a,b) and in (22). Adjectives and participles marked for definiteness with the suffix *–ni* do not distinguish between direct and oblique forms; for instance, the example in (32) shows the definite adjective modifying a head noun in the lative.

5 Distributive marking in the noun phrase

The distributive suffix *-t'a* occurs widely and can combine with any category except finite verbs.[4] The general function of *–t'a* is to mark distributivity; the relevant distribution can occur over a plural entity, a plural eventuality, or a plurality of times or locations. Such distributive ambiguity (ranging over participants and events) is well attested cross-linguistically (cf. Gil 1982, 1988, 1992; Choe 1987; Zimmermann 2002; Schwartzschild 1996; 2011; Cabredo Hofherr and Laca 2012, a.o.).

In order to discuss distributive marking in Tsez, we will start by introducing the notions of *distributive key* and *distributive share* (following Gil's work). DISTRIBUTIVE KEY is a concept that forces the plural reading. In that sense, its function is similar to that of a wide-scope-taking

[4] For the use of the distributive suffix outside noun phrases, see CH. YY[PredP] and CH. YY[Adverbial clauses].

expression. It defines the domain within which entities are distributed. DISTRIBUTIVE SHARE designates the entities that are distributed, thus resembling a narrow-scope-taking expression. In the famous sentence below, a set of unhappy families defines the domain in which distribution occurs. This set of families serves as the distributive key; the way in which they are unhappy is the distributive share linked to the unhappy families:

(36) Every unhappy family is unhappy in its own way. (Tolstoy, *Anna Karenina*)

For a distributive reading to hold, there has to be a pairing of key and share, although these expressions do not have to be explicit.

The statement in (36) is actually only the second part of the maxim; in the original text of *Anna Karenina,* (36) is preceded by the following statement:

(37) Happy families are alike.

In (37), there is no distribution; the set of happy families is not broken into units, each with its own mode of happiness. Instead, the happy families can be viewed as an aggregate (a collective). Within that aggregate, the units can still be recognized as separate, distinct entities. Such recognition of separate units would amount to *individuation*: the distinctness of an entity from its own background. So, if (37) presents 'happy families' as an aggregate, the example below individuates those families:

(38) Every happy family is the same.

English uses the same word, *every,* both in distributive expressions and in expressions of individuation, and it seems that the two concepts receive the same encoding across languages.

We are now ready to address the distribution and meaning of the suffix *–t'a*; in our discussion, we will be relying on the notions of distribution (with key and share as important pairings) and individuation.

To begin, the suffix *–t'a* can combine with any expression except finite verb form. In CH. YY[Adverbial Clauses], we discuss clausal distributive phrases, with *–t'a* occurring on the head of a converbal clause. In this chapter, we will concentrate on the use of *–t'a* with constituents of a noun phrase. In terms of distribution, we find that *–t'a* can appear either on the head noun or on a subconstituent within a noun phrase. In terms of meaning, *-t'a* encodes both distribution over sets, and individuation within a set. Although at first sight these distributional and interpretive properties of *–t'a* may seem distinct (and it may also seem that *–t'a* has many other disparate functions), we propose that they should be unified under the following principle:[5]

[5] We are grateful to David Gil for proposing this analysis to us. The unified approach to *–t'a* is similar to his analysis of Georgian distributives (Gil 1988). The contrast between (59a) and (59b) is reminiscent of the contrast between non-reduplicated and reduplicated expressions in Georgian, where reduplication forces the distributive reading.

(39) *–t'a* marks a constituent that it attaches to as distributive share; this share then selects an overt or presupposed element as its key

This principle accounts for event distributivity, with the distributively-marked noun phrase looking outside for its key, which can be an adverb, the predicate, or a contextually recoverable item. In this function, the suffix appears on the head noun. But the principle in (39) also explains distributivity internal to a noun phrase, where the modifier marked with *–t'a* is the share and the head noun is its key, and the modifier distributes over its head NP-internally. Ambiguity arises only with numerical modifiers, which are typically interpreted as distributive share, but can also be interpreted as individuating. In what follows, we present the application of this general principle in different contexts.

If the distributive marker *–t'a* appears on the head of a noun phrase, it marks that noun phrase as distributive share, in other words, as a referent whose distribution has to be evaluated with respect to either the event denoted by the predicate or another referent named or presupposed in the clause. For example, the sentence below can only mean that the girl stayed in the cowshed multiple times, not that she stayed in multiple cowsheds, although such a meaning is perfectly plausible from the standpoint of world knowledge. The cowshed is the distributive share, and the event of being frequently locked up is the distributive key.

(40) Šomorax-no ziya-de puräza reču-ƛ-t'a
often-TOP cow-APUD.ESS near cowshed-CONT.ESS-DISTR
yiz-ä ža y-iši-x zow-n.
DEM.IPL-ERG DEM.ABS.(II) II-lock.up-IPFV.CVB be.PST-PST.nWIT
'They often locked her up in the cowshed next to the cow.' (Best'al kid:4)
NOT: 'They locked her up in cowsheds next to a cow.'

In the next example, the singular noun *miƛ'i* 'ram' occurs with the distributive suffix. The sentence encodes an event that is distributed over a plurality of times; the same ram comes back each day to lick the salt. Again, the ram is the distributive share and the adverbial phrase 'every day' is the distributive key.

(41) Šibaw ɣud-ƛ'o šuda-ƛ'-āy ciyo r-ag-ani-x
every day-SUPER.ESS grave-SUPER-ABL salt.ABS.IV IV-lick-MASD-AD.ESS
sis ixiw miƛ'i-t'a b-ay-x zow-n.
one big ram.ABS.III-DISTR III-come-IPFV.CVB AUX.PST-PST.nWIT
'Every day a big ram would come to lick salt off the gravestone.' (Miƛ'i:5)

Let us now turn to the use of *-t'a* on NP-internal modifiers, starting with count nouns. Noun phrases with a modifier marked with *–t'a* are typically plural. The main function of *–t'a,* in keeping with principle (39) above, is to indicate that items within the set denoted by a plural noun phrase are recognized as separate — that is, are individuated. To illustrate, imagine a bunch of red flowers. This bunch can be described as an aggregate of flowers without special attention being paid to its individual units, or as a collection within which each separate flower is recognized. To express the aggregate meaning, Tsez uses a noun phrase with a regular adjective, and to express the individuated meaning, it employs the distributive marker on the adjective:

(42) a. c'uda gagali-bi
red flower-PL.ABS.nIPL
b. c'uda-t'a gagali-bi
red-DISTR flower-PL.ABS.nIPL

Several Tsez nouns have the same form in the singular and plural; for example, *xexbi* 'child; children', *ɣˤanabi* 'woman; women'; *šebin* 'thing; things'; *boc'i/boc'a* 'wolf; wolves'. If such nouns occur with a modifier that does not have the *–t'a* suffix, they are ambiguous between singular and plural; if accompanied by a distributive modifier, they are necessarily interpreted as plural.[6] Compare the meaning difference between (43a) and (43b):

(43) a. lalay-xosi xexbi
cry-PRS.PTCP child.ABS
'a crying child; crying children'
b. lalay-xosi-t'a xexbi
cry-PRS.PTCP-DISTR child.ABS
'crying children'
NOT: 'a crying child'

The individuating function of *-t'a* is further confirmed by its co-occurrence with definite marking. The suffix *–t'a* is strongly preferred when the adjective is marked as definite with the suffix *–ni,* as in (44a-b) (see also the nominalized adjectives with *–t'a* in example (4) above and (45c) below).

(44) a. c'uda-t'a-ni ged-ma-bi
red-DISTR-DEF garment-OS-PL.ABS.nIPL
'the red dresses'
b. t'ek-mo-za-s-t'a-ni humer-ya-bi
book-OS-PL.OS-GEN1-DISTR-DEF page-OS-PL.ABS.nIPL
'the pages of books'

Examples in (45) all involve what Schwartzschild (2011) calls "stubbornly distributive predicates" such as 'big' or 'tall'. Regardless of the context or noun that these predicates combine with, they always impose a distributive interpretation; note that *–t'a* cannot be omitted. It is possible that the distributive interpretation in (45a, b) is reinforced by the fact that the head nouns denote paired objects. However, in (45d), the head noun is neither a denotation of a finite set nor definite, yet the distributive marking is still required:

(45) a. r-exora-*(t'a) aħ-ya-bi
nIPL-tall-DISTR ear-OS-PL.ABS.nIPL
'long ears'

[6] If the modifier shows agreement with the head noun, then the difference between the singular and plural agreement markers on the verb means that this ambiguity does not arise.

b. kot'on-*(t'a) ʕoɣ-re-bi
short-DISTR leg-OS-PL.ABS.nIPL
'short legs'

c. r-ˢeɣe-*(t'a)-ni miša-r-bi
nIPL-small-DISTR-DEF vein-OS-PL.ABS.nIPL
'the small blood vessels'

d. r-ˢeže-*(t'a) ɣˢutk-a-bi
nIPL-big-DISTR house-OS-PL.ABS.nIPL
'big buildings'

The modifier combining with *–t'a* can be an adjective, as already shown in examples (42b), (44a), and (45a-c). It can also be a demonstrative (46), an adverb or postposition used attributively (47), a participle (48) (see also (43b)), or a relative clause (49).

(46) nediw-t'a gulu-bi
such-DISTR horse-PL.ABS.nIPL
'such horses'

(47) a. sidä sidde igo-t'a q'ˢano šud-bi
REFL-APUD.ESS next-DISTR two grave-PL.ABS.nIPL
'two graves next to each other' (Bilq'isdi:60)

b. ruɣu-ɬ xizay-t'a gulu-bi
footprint-CONT.ESS behind-DISTR horse-PL.ABS.nIPL
'horses whose steps one follows'

(48) a. r-oƛ-xosi-t'a ziya-bi
nIPL-be.sick-PRS.PTCP-DISTR cow-PL.ABS.nIPL
'sick cows'

b. ƛäxu-ru-t'a xexbi
leave-PST.PTCP-DISTR children.ABS.nIPL
'abandoned children'

(49) a. reƛ-i-s r-ic'xo-t'a ħuru-bi
meat-OS-GEN1 nIPL-fill-PRS.PTCP-DISTR tray-PL.ABS.nIPL
'trays filled with meat'

b. boc'-ä zey-z-ä r-exu-r-äsi-t'a
wolf-ERG bear-PL.OS-ERG nIPL-die-CAUS-RES.PTCP-DISTR
posu
cattle.ABS.nIPL
'the cattle killed by wolves and bears' (ʕAt'idno, Q'arumno:42)

Genitive adnominal modifiers can take the distributive suffix as long as the genitive denotes a material or a general property (see section 5.2 below), as in (44b) above and in the example below:

(50) a. ʕomoy-s-t'a aħ-ya-bi
donkey-GEN1-DISTR ear-OS-PL.ABS.nIPL
'donkey ears' (NOT: 'the ears of a certain donkey')

b. qaci-s-t'a kuro-bi

wood-GEN1-DISTR fence-PL.ABS.nIPL
'wooden fences'

However, if the genitive denotes a genuine possessor or appears in a measure phrase (see 5.3 below), the distributive suffix is unacceptable:

(51) a. #b-exa-ru-za-s-t'a λuza-bi
IPL-die-CAUS-PST.PTCP-OS-GEN1-DISTR bone-PL.ABS.nIPL
('the bones of those who were killed')

b. #ciyo-s-t'a t'akan-bi
salt- GEN1-DISTR glass-PL.ABS.nIPL
('cups of salt')

If an adnominal genitive is phrasal, the distributive suffix can appear on one of its subconstituents, thus circumventing the restrictions illustrated in (51). For example, in (52), the distributive suffix appears on the adverbial *hemedur,* a subconstituent of the nominalized relative clause; the nominalized participle appears as the adnominal genitive:

(52) [Hemedur-t'a b-exa-[r]ru]-z-a-s λuza-bi
such-DISTR IPL-die-CAUS-PST.PTCP-ATTR.OS-OS-GEN1 bone-PL.ABS.nIPL
yoł yizi.
be.PRS DEM.PL.ABS
'These are the bones of those who were killed for that reason.' (Babiwn, užin, Okun:17)

A distributive modifier can co-occur with a numeral in the collective form, as in the following example (the collective suffix is optional). The use of the collective form underscores the notion of plurality, and the use of the modifier with *–t'a* indicates individuation within that set.

(53) łˤono(-n) bercinaw-t'a kid-ba-bi
three-COLL beautiful-DISTR girl-PL.OS-PL.ABS.IPL
'(the) three beautiful girls'

Let us now turn to mass nouns. Mass nouns denote an aggregate with poorly distinguished units, so the use of the distributive suffix on adnominal modifiers of mass nouns may appear incongruous. The differences are indeed subtler than what we observed with count nouns, but some interpretive generalizations still emerge. Consider the following three sentences:

(54) a. Eni-y-ä gimušaw qiqi r-oy-x.
mother-OS-ERG tasty porridge.ABS.IV IV-do-PRS
'Mother makes/is making good porridge.'

b. Eni-y-ä gimušaw-t'a qiqi r-oy-x.
mother-OS-ERG tasty-DISTR porridge.ABS.IV IV-do-PRS
'Mother makes good porridge (generally).'

c. Eni-y-ä gimušaw qiqi-t'a r-oy-x.
mother-OS-ERG tasty porridge.ABS.IV-DISTR IV-do-PRS

‘Mother regularly makes good porridge.’

Example (54a) can refer to a single event, including an ongoing one. Example (54b) describes the general quality of mother’s porridge, and (54c) means roughly “every time mother cooks she makes good porridge”. Thus, in (54b) ‘tasty’ is the distributive share, and ‘porridge’ is the key, as in the examples above with count nouns. Here, the head noun is mass, coming without a prototypical unit of counting. However, the distributive marking forces the hearer to construct such a unit, and the obvious choice is *portions of*, implying that every portion of porridge that Mother makes is delicious; hence, the reading “generally”, indicating a habitual interpretation. In (54c), ‘tasty porridge’ is the distributive share, and the associated event is the key: every cooking (key) results in tasty porridge. This reading makes (54c) most appropriate when used as a commentary on Mother’s qualifications as a cook (so-called dispositional interpretation). In both (54b) and (54c), the use of the distributive marker rules out the episodic interpretation.

Finally, let us examine adnominal numerals. Such numerals easily combine with the distributive suffix, but the interpretation of noun phrases with distributive numerals is unlike what we observed for noun phrases with other types of modifiers. A noun phrase modified by cardinal numeral with the suffix *–t’a* can have the reading of individuation or distributivity. For instance, (55) could mean either that they had two or three animals and these animals are viewed as individuated, or that each person in the group had two or three animals (distributive reading):

(55) Žedu-s q’ˤano-ɬˤono-t’a posu-re-s šebin
DEM.IPL-GEN1 two-three-DISTR cattle-OS-GEN1 thing.ABS.IV
zow-s.
be.PST-PST.WIT
‘They had two or three heads of cattle.’ (individuation)
‘They had two or three heads of cattle each.’ (distributive)

Likewise, in the following example with a suffix on the numeral, the preferred interpretation of the noun phrase is distributive, with *ʕoƛnot’a tetrad* ‘seven notebooks’ functioning as a distributive share; however, the interpretation that we bought seven individuated notebooks is also possible.

(56) El-ä ʕoƛno-t’a tetrad y-is-si.
IPL-ERG seven-DISTR notebook.ABS.II II-take-PST.WIT
‘We bought seven notebooks each.’ (distributive)
‘We bought seven notebooks.’ (individuation)

Distributive phrases with the numeral ‘one’ are comparable to those phrases where *–t’a* appears on a head count noun without a numeral. Compare (57) and (58), which seem to be truth-conditionally equivalent; our consultants consider them completely interchangeable:

(57) Neł-ä sis-t’a heneš xex-za-r teƛ-si.
DEM.nI-ERG one-DISTR apple.ABS.III child-OS-LAT give-PST.WIT
‘She gave the children an apple each.’
(58) Neł-ä heneš-t’a xex-za-r teƛ-si.
DEM.nI-ERG apple.ABS.III-DISTR child-OS-LAT give-PST.WIT

'She gave the children an apple each.'

When used without the distributive marker, the sentence represented in (57) and (58) has a different meaning; the interpretation here is that there was one apple which the children may have to share.

(59) Neł-ä heneš xex-za-r teƛ-si.
DEM.nI-ERG apple.ABS.III child-OS-LAT give-PST.WIT
'She gave the children an apple.' (e.g., to split amongst them)

More generally, if a noun phrase appears without the distributive marker, it can be construed as referring to an aggregate collective, something that is impossible for the distributive form. Compare (60a) and (60b); in (60a), two interpretations are possible: either each ring is expensive (the distributive reading) or individual rings may be inexpensive, but as a totality, the rings are costly. In (60b), however, only the distributive reading is possible; each ring must be expensive on its own.

(60) a. xiriyaw bašiqoy-bi
expensive ring-PL.ABS.nIPL
b. xiriyaw-t'a bašiqoy-bi
expensive-DISTR ring-PL.ABS.nIPL
'expensive rings'

6 Noun phrases with attributive modifiers

Attributive modifiers of nouns include adjectives proper; participles; relative clauses of different types, including participial relatives (see the chapter on relative clauses); derived attributive modifiers; demonstratives; numerals; and quantificational expressions.

The examples in this chapter have already illustrated a number of adjectival modifiers; cf. (20), (22), (23), (26), (29) through (34). See also the chapter on attributive phrases for more details on adjectival phrases and Chapter YY for adjectival morphology. Some examples of participles have also appeared earlier in this chapter, e.g., (24), (43), (48), (49), (52). For details of relative clauses (which include but are not limited to participial relatives), see the chapter on relative clauses, and for the formation of participles, see CH.YY[VERB MORPHOLOGY].

Attributive modifiers can also be derived from a variety of categories (nouns, noun phrases, adverbs, postpositions) with the help of the attributive morpheme *–si* (direct form)/*-zo* (oblique form). The examples in (61a-d) show attributive modifiers derived from oblique forms of nouns and those in (62a,b) show modifiers derived from oblique forms of demonstratives. Finally (62a, b) illustrate attributives derived from adverbs (see also the chapter on adjectival phrases for further examples and discussion). In terms of their function in the noun phrase, attributive modifiers are not different from adjectives proper.

(61) a. ƛ'ˢā-ƛ'o-si užі
roof-SUPER.ESS-ATTR boy.ABS.I
'the boy on the roof'

b. žek'u-ł-er-si žek'u
person-CONT-LAT-ATTR person.ABS.I
'a person that made something out of himself' (lit.: into the midst of people's person)

c. qʿim-zo oz-ā-si ƛexu
self-GEN2 eye-IN.ESS-ATTR log.ABS.II
'the beam in one own's eye'

d. nuc-o-ƛ'o-si t'ut'
honey-OS-SUPER.ESS-ATTR fly.ABS.III
'bee' (lit.: fly that is on honey)

(62) a. nesi-r-si daru
DEM.I-LAT-ATTR medication.ABS.III
'a medication for/against him' (Riynoxu:25)

b. žedu-qo-si posu
DEM.IPL-POSS.ESS-ATTR cattle.ABS.IV
'the property on them/related to them'

(63) a. elo-si łi
there-ATTR water.ABS.IV
'the water over there'

b. heme-si ħalt'i
so-ATTR work.ABS.III
'such work'

6.1 Noun phrases with demonstratives

Demonstratives and their derivation are described in Ch. YY. Recall that demonstratives distinguish three degrees of deixis: "this", "that (visible), and "that, yonder (invisible)". All types of demonstratives can occur with nouns, and these demonstratives always precede the head noun. While common nouns in the singular belong to four genders, demonstratives distinguish only gender I vs. the other genders:

(64) a. yeda/enda/yisi uži
this.I/that.I/that.I boy.ABS.I
'this/that boy'

b. yedu/endu/yiła kid
this.nI/that.nI/that.nI girl.ABS.II
'this/that girl'

The following demonstratives do not have gender distinctions in the singular: *ža* 'this', *howža* 'that'. Older descriptions of Tsez mention gender distinctions in plural demonstratives (Bokarev 1959: 198; Imnajšvili 1963: 101-116), but these seem to have disappeared from the modern language, at least in some dialects:

(65) a. izi(-ri)/enzi-(-ri) uži-bi
this.PL/that.PL boy-PL.ABS.IPL
'these/those boys'

b. izi(-ri)/enzi-(-ri) kid-ba-bi
this.PL/that.PL girl-OS-PL.ABS.nIPL

'these/those girls'

Some demonstratives show case concord with the head noun, following the distinction between direct (co-occurring with the absolutive) and oblique (co-occurring with all other cases). Thus:

(66) a. ža žek'u
DEM man.ABS.I
'this man'
b. nesä žek'u-r
DEM.I.OBL man-LAT
'to this man'

(67) a. ža k'et'u
DEM cat.ABS.III
'this cat'
b. neła k'et'u-r
DEM.nI.OBL cat-LAT
'to this cat'

A number of demonstratives have lost the direct–oblique contrast; a comparison with earlier descriptions of Tsez suggests that the loss of this contrast is ongoing.[7]

When two or more nouns modified by demonstratives are coordinated, it is typical for the demonstrative to be repeated even when both forms are the same:

(68) a. ža kid-no *(ža) užin
DEM girl.ABS.II-and DEM boy.ABS.I-and
'this girl and this boy'
b. yizi kid-ba-bi-n *(yizi) uži-bi-n
DEM girl-OS-PL.ABS.nIPL-and DEM boy-PL.ABS.IPL-and
'these girls and these boys'
c. ža kid-no yizi užin
DEM girl.ABS.II-and DEM boy-PL.ABS.IPL-and
'this girl and these boys'

(69) a. yizi kid-ba-bi-n *(ža) užin
DEM girl-OS-PL.ABS.nIPL-and DEM boy.ABS.I-and
'these girls and this boy'
b. ža kid-no užin
DEM girl.ABS.II-and boy.ABS.I-and
'this girl and a/some/the boy'

If the first coordinated noun is in the plural, the plural demonstrative can be understood only as modifying that noun (i), not the entire coordinated noun phrase (ii):

[7] There is some dialectal variation with respect to which demonstratives have a specialized oblique form (Bokarev 1959: 198; Imnajšvili 1963: 101-116).

(70) izi(-ri) kid-ba-bi-n uži-n
DEM.PL girl-OS-PL.ABS. nIPL-and boy.ABS.I-and
'these girls and boy'
(i) [these girls] and a/the boy
NOT: (ii) these [girls and boy]

Plural demonstratives modifying several coordinated singular nouns are judged as awkward and dispreferred:

(71) #izi(-ri) kid-no uži-n
DEM.PL girl.ABS.II-and boy.ABS.I-and
'these girl and this boy'

Demonstratives are commonly used to indicate the definiteness of a noun phrase, whereas the numeral *sis* 'one' is used to underscore indefiniteness. However, such use is never grammaticalized, and the respective modifiers can be omitted in context.

6.2 Noun phrases with numerals

6.2.1 Cardinal numerals

Numerals appear as modifiers of nouns and, as such, precede nouns. Nouns modified by a numeral are not marked for plural; consider example (1) above and the examples below. As (72) shows, a noun modified by a numeral is singular for the purposes of verbal agreement as well; the verb AGR-*oɣa* agrees with the absolutive 'two-three friends' in the singular.

(72) Nes-ä q'ˤano-ɬˤono-n halmaɣ-no sadaq
DEM.I-ERG two-three-COLL friend.ABS.I-TOP together
Ø-oɣ-no.
I-take/pull-PST.nWIT
'He put two or three friends together.' (based on Ražbadinno, Tawadin: 72)
(73) Nesi-s ɬˤono uži zow-n.
DEM.I-GEN1 three boy.ABS.I be-PST.nWIT
'He had three sons.'

Numerals modifying an overt head noun often occur in the collective form, as in (72). This form is not used when the numerical expression is used predicatively:

(74) [Eli] [ɬˤono(*-n) halmaɣ zow-s].
IPL.ABS three-COLL friend.ABS.I be-PST.WIT
SUBJECT PREDICATE
'We were three friends.'

Cardinal numerals show case concord with the head noun; they distinguish two forms: the direct form co-occurring with the absolutive, as in the examples above, and the oblique form co-occurring with all other cases. The formation of direct and oblique forms is discussed in Ch. YY. Compare the direct form of the numeral 'three', above, and its oblique form below.

(75) a. ɬˤora užiq-āy
three.OBL boy-POSS-ABL
'from three boys'
b. ɬˤora užis
three.OBL boy-GEN1
'three boys', belonging to three boys', etc.

In complex numerals, all the subconstituents of the numeral appear in the oblique form:

(76) oc'ira ɬˤora užir
ten.OBL three.OBL boy-LAT
'to thirteen boys'

A numeral preceding two or more nouns coordinated with 'and' can take scope over the first noun or over the entire noun phrase. Thus, the following example can mean ten animals all together (cats and puppies) or eleven animals (ten cats and a puppy). The second reading, however, is less preferred; it requires a slightly longer pause between the coordinated constituents.

(77) oc'ino k'e'tu-n k'uci-n
ten cat-ABS.III-and puppy-ABS.III-and
'ten cats and puppies'
(i) ten [cats and puppies]
(ii) [ten cats] and a puppy

Approximate amounts are expressed by a numeral in the equative form in *–ce*, usually followed by the adjective AGR-*iłe* 'similar', which agrees with the head noun. The numeral in such forms does not show case concord with the head noun. For example, in (78), 'three' is in the direct form because the head noun is in the absolutive, and in (79), it is in the direct form again, although the head noun is not in the absolutive case:

(78) Dä-q ɬˤono-ce y-iłe ʕuruš (yoł).
1SG-POSS.ESS three-EQUAT II-similar rouble.ABS.II be.PRS
'I have about three roubles.'
(79) Nes-ä kaɣat ɬˤono-ce b-iłe saʕat-y-ā
DEM.I-ERG letter.ABS.II three-EQUAT III-similar hour-OS-IN.ESS
cax-sis.
write-PST.WIT
'He wrote the letter in about three hours.'

6.2.2 Ordinal numerals

Ordinal numerals are formed from cardinal ones with the addition of the form *äƛiru/āƛiru* (originally the past participial of the verb *eƛa* 'say', a non-agreeing verb). Ordinal numerals have the same direct/oblique distinction observed in the cardinals. Compare simple numerals in (80) and compound numerals in (81):

(80) a. ɬˤono-äƛiru muq
three-ORD row.ABS.III
'third row'

b. ħuł eli ɬˤora-äƛiru muq-re-ł
yesterday 1PL.ABS.IPL three.OS-ORD row-OS-CONT.ESS
b-iči-s, žaqˤuł q'ˤuna-äƛiru-za-ł b-iči-x.
IPL-stay-PST.WIT today two.OS-ORD-OS-CONT.ESS IPL-stay-PRS
'Yesterday we sat in the third row, and today, in the second.'

(81) a. Yedu oc'ino iłno-äƛiru otaxi yoł.
DEM.ABS ten six-ORD room.ABS.IV be-PRS
'This is apartment 16.'

b. Ža oc'ira iłłira-äƛiru t'ala-m-ā y-iči-x.
DEM.ABS ten.OS six.OS-ORD floor-OS-IN.ESS II-stay-PRS
'S/he lives on the sixteenth floor.'

Since ordinal numerals show the same case concord with nouns as cardinals do, we can conclude that the participial form marking ordinality is frozen and no longer functions as a participle; if it did function as a participle, the numeral would be part of the relative clause and would always appear in the same form. The form appearing in (80b) would be unmotivated.

6.2.3 Fractions

The word for 'half' is AGR-*oƛik'u*, which is used as a prenominal modifier agreeing with its head in gender. This word is different in its function from all other words and expressions representing parts/fractions. It has distinct direct and oblique forms:

(82) Di b-oƛik'u micxir pasad b-oy-s.
1SG.ERG III-half money.ABS.III spending III-do-PST.EVID
'I spent half of the money.'

(83) Di debe-r b-oƛik'ä saʕat-y-ä kwat'izi
1SG.ABS 2SG-LAT III-half.OS hour-OS-IN.ESS waiting
y-oq-xo.
II-become-PRS
'I (woman speaking) have been waiting for you for half an hour.'

Fractions other than 'half' are represented by complex expressions including the word *but'a* 'part, fraction, share' (gender III). The denominator appears as a numerical expression in the cont-ablative, preceding the numerator. Some examples with the numerator in the absolutive case are presented below:

(84) a. ɬˤora but'a-ł-āy q'ˤano but'a
three.OBL part-CONT-ABL two part.ABS
DENOMINATOR NUMERATOR
'two thirds' (lit.: from three parts two parts)

b. uyra but'a-ł-āy sis but'a
four.OBL part-CONT-ABL one part.ABS
DENOMINATOR NUMERATOR
'one fourth'

c. biƛƛira but'a-ł-āy iłno but'a
eight.OBL part-CONT-ABL seven part.ABS
DENOMINATOR NUMERATOR
'seven eighttths'

d. oc'ira iłłira but'a-ł-āy łeno but'a
ten.OBL six.OBL part-CONT-ABL five part.ABS
DENOMINATOR NUMERATOR
'five sixteenths'

If a fractional expression bears a case other than absolutive, the numeral in the numerator also appears in the oblique form, as shown in the example below. Compare the oblique form *q'ˁuna* 'two' in the numerator, with the direct form *q'ˁano* in the result below. The details of the structure are shown in (85b):

(85) a. Biƛƛira but'a-ł-āy sis but'a
eight.OBL part-CONT-ABL one part.ABS
oc'ira iłłira-ł-āy q'ˁuna but'a-ƛ'o-r
ten.OS six.OS-PART-CONT-ABL two.OBL part-SUPER-LAT
kur-nāy biƛƛira but'a-ł-āy q'ˁano but'a
throw-COND eight.OBL part-CONT-ABL two part.ABS.II
y-od-in.
II-do-FUT
'One eighth plus two sixteenths will make two eighths.'

b. [*pro* biƛƛira but'a-ł-āy sis but'a
[[eight.OBL part-CONT-ABL] one part].ABS
oc'ira iłłira-ł-āy q'ˁuna but'a-ƛ'o-r
[[ten.OBL six.OS-PART-CONT-ABL] two.OS part]-SUPER-LAT
kur-nāy] *pro* biƛƛira but'a-ł-āy q'ˁano but'a
throw-COND [eight.OBL part-CONT-ABL two part].ABS.II
y-od-in.
II-do-FUT1
("If one throws 1/8 on 2/16, one will make 2/8.")

6.3 Quantified noun phrases

A number of quantificational modifiers are formed on the basis of the indeterminate element *nāsi* (direct form)/*nāz-* (oblique form) 'which; some'. This form can be traced back to the combination of the adverbial *nā* 'where' and the attributive suffix *–si*, from which it still has a direct and an oblique form. However, we consider it synchronically indivisible. The forms below are derived from *nāsi* with the addition of particles (we present the direct and oblique forms separated by a slash). As in a number of other cases, the topic particle *–ƛa* and the contrastive particle *–go* are used to derive more specific forms from indeterminates:

(86) a. nāsin/nāzon (< nāsi-n)
'all' some-and
b. nāsiƛa/nāzoƛa (< nāsi-ƛa)
'some, certain' some-TOPIC
c. nāsigo/nāzogo (< nāsi-go)
'whichever' some-CONTRASTIVE

These modifiers contain elements corresponding to discourse particles (*-n(o)* marks topic, *-ƛa* marks 'as for' topics, and *-go* indicates contrast), but it is unclear whether these particles are synchronically still segmentable in (86a-c). The quantificational modifier *nāsigo* alternates with the composite *nāsigo* AGR-*oqƛin,* where *oqƛin* can be decomposed into the future of the verb AGR-*oqa* 'become' and the quotative marker *ƛin.* Within this composite form, *nāsigo* does not alternate between direct and oblique.

Other quantificational modifiers which distinguish between the direct and oblique forms are based on the numeral *sis* 'one' (see example (7) above for the oblique form *sida*):

(87) a. sis(kin)/sida(kin) (< sis-kin)
'some' (in affirmative contexts) one-FOC
b. sis(kin)/sida(kin)
'any, none' (under the scope of negation)

The following quantificational modifiers do not distinguish between direct and oblique forms:

(88) a. boƛ'araw
'any' (free choice)
b. AGR-āttiru
'any' (free choice)
c. AGR-iqi-AGR-āqiru
'any' (free choice), reduplicated participial form of *–iqa* 'get, receive'
d. didiwkin
'any, none' (under the scope of negation)
d. didiw
'such', 'which; what/what kind' (in questions)
e. šomo/dice
'how many/how much' (used in questions)
f. šomoƛa/diceƛa
'several'
g. žiwžiw
'every'
h. šibaw
'each'
i. c'ik'iw
'all'
j. AGR-aˢq'u
'many, much'

k. ʕuraw
'many, much; numerous'
l. xoli
'many, much'
m. dahaw
'few, little'
n. t'āk'i
'few, little; a few, a little'
o. muk'uce
'a little' (only with mass nouns)

The meanings of *nāsin* and *c'ik'iw,* on the one hand, and *žiwžiw* and *šibaw,* on the other, seem very close, and in fact native speakers often offer *nāsin* as their first choice for expressions denoting an exhaustive set. However, these modifiers have distinct morphological and syntactic properties. First, the words *nāsin* 'all' and *c'ik'iw* 'all', when modifying a count noun, combine with a head noun in the plural; the words *žiwžiw* and *šibaw* co-occur with singular head nouns. Compare the following examples:

(89) a. Nāsin kid-ba-bi/*kid guruƛ-xo.
all girl-OS-PL.ABS.nIPL/girl.ABS.II cry-PRS
'All the girls are crying.'
b. Žiwžiw kid/*kid-ba-bi guruƛ-xo.
every girl.ABS.II/girl-OS-PL.ABS.nIPL cry-PRS
'Every girl is crying.'
(90) a. C'ik'iw es-na-bi/*esiw idu yoł.
all sibling-PL-PL.ABS.IPL/sibling.SG.ABS.I/II at.home be.PRS
'All the siblings are home.'
b. Šibaw esiw/*es-na-bi idu yoł.
every sibling.SG.ABS.I/II/sibling-PL-PL.ABS.IPL at.home be.PRS
'Every sibling is home.'

Only *nāsin* and *c'ik'iw,* but not *žiwžiw* or *šibaw,* can modify mass nouns:

(91) a. Nāsin/c'ik'iw ciyo łi-s.
all/all salt.ABS.II be.over-PST.WIT
'All the salt has run out.'
b. *Žiwžiw/šibaw ciyo łiy-s.
every/each salt.ABS.II be.over-PST.WIT

Only noun phrases containing *nāsin/c'ik'iw,* but not *žiwžiw* or *šibaw,* can combine with collective predicates; thus, (92b) is as unacceptable as its English translation:

(92) a. Nāsin kid-ba-bi sadaq guruƛ-xo.
all girl-OS-PL.ABS.nIPL together cry-PRS
'All the girls are crying together (in unison).'

b. *Žiwžiw kid sadaq guruƛ-xo.
every girl.SG.ABS.II together cry-PRS
("Every girl is crying together.")

Quantificational modifiers are not used in expressions of time and place such as 'every year, 'any day', 'every village', etc. Such expressions of time and place are represented by spatial forms of the respective nouns ('day', 'year', 'village', etc.) and are discussed in the chapter on adverbial phrases; see also the denominal form *sasaqazdā* in example (93) below.

Below, we present examples of quantified noun phrases used in clauses:

(93) Sasaqazdā neƛ-ä r-aˢq'u cet'o-bi ħaƛu-x.
every morning DEM.nI-ERG nIPL-many pill-PL.ABS.nIPL drink-PRS
'She takes (lit.: drinks) many pills every morning.'

(94) ħuł neƛ-ä dahaw cet'o-bi ħaƛu-za-ƛ'
yesterday DEM.nI-ERG few pill-PL.ABS.nIPL drink-NMLZ-SUPER.ESS
neƛ-as b-igu ħal zow-nč'u.
DEM.nI-GEN1 III-good health.ABS.III be-PST.WIT.NEG
'Because she took too few pills yesterday, she was not feeling well.'

(95) Neƛ-ä didiwkin cet'o-bi ħaƛ-inč'u.
DEM.nI-ERG any pill-PL.ABS.nIPL drink-PST.WIT.NEG
'She did not take any pills.'

(96) Elu-z magazin-yā nāsiƛa kanpit-ya-bi teƛ-xo.
1PL-GEN2 store-IN.ESS some candy-OS-PL.ABS.nIPL give-PRS
'There is some candy in our store.'

(97) Nāsigo b-oqƛin magalu b-is-o.
whatever III-whatever bread.ABS.III III-take.IMPER
'Buy whatever bread there is.'

(98) Siskin t'ek ānu dä-q.
any book.ABS.II be.PRS.NEG 1SG-POSS.ESS
'I don't have any books.'

(99) Boƛ'araw xex-za-r kanpit-ya-bi r-eti-x.
any child-OS-LAT candy-OS-PL.ABS.nIPL nIPL-like-PRS
'Any child likes candy.'

(100) Nāzon xex-za-r maroženi r-eti-x.
all.OBL child-OS-LAT ice cream.ABS.IV IV-like-PRS
'All children like ice cream.'

A more detailed discussion of quantified expressions with discourse particles can be found in the chapter on particles.

7 Noun phrases with nominal modifiers

Nominal modifiers of nouns do a great deal of work in Tsez noun phrases, introducing a variety of concepts ranging from possession to complement clauses with a head noun. These widely varied conceptual relations are uniformly encoded by the genitive suffix on the adnominal modifier that precedes the head noun. As with some other modifiers, adnominal genitives show

concord with the head noun, appearing in the direct form (Genitive 1) when the head noun is in the absolutive, and in the oblique form (Genitive 2) with all other forms of the head noun.

Genitive markers can only combine with a noun; if a given modifier is not nominal, it must be substantivized in order to combine with the genitive. For example, the past participle formed from AGR-*egir* 'send' is nominalized with the abstract suffix *-łi* below, and this form can appear as an adnominal genitive modifying the word 'reason'. The nominalized participle still retains its agreement with the absolutive object, which allows the hearer to deduce in this particular case that the person sent somewhere was a man:

(101) Ø-egä-ru-łi-s bahana
I-send-PST.PTCP-NMLZ-GEN1 reason.ABS.III
'the reason for sending someone'

7.1 Adnominal possessor

Tsez does not distinguish between alienable and inalienable possession. Possessive phrases consist of an adnominal genitive (possessor) followed by the head noun (possession). Possessors can be expressed by a pronoun, noun, substantivized or nominalized expression— i.e., any form that can appear as a noun phrase (see section 1 above). Some examples of pronominal possessors follow (note that 1sg and 2sg pronouns have an irregular form in genitive 1; see Ch. YY [pronouns]):

(102) a. dey/debi mec
1SG.GEN1/2SG.GEN1 language.ABS.III
'my/your language'
b. žedu-s q'ut'i
IPL-GEN1 agreement.ABS.III
'our agreement'
c. nesi-s xabar
DEM.I-GEN1 news.ABS.III
'his news'
d. gamuš-yo-s šilu
bull-OS-GEN1 horn.ABS.II
'bull's horn'

Examples of possessors expressed by a noun phrase, with and without modifiers, are shown below. In (103c), the possessor in the genitive is modified by a relative clause.

(103) a. bahadur-e-s pikru
brave.man-OS-GEN1 thought.ABS.III
'the brave man's idea'
b. ža ʕaƛo-s raʕalłi
DEM village-GEN1 edge.ABS.IV
'the edge of this village'

c. [nes-ä y-ow-xosi] kid-b-es eni-babiw
DEM.nI-ERG II-marry-PRS.PTCP girl-OS-GEN1 parents.ABS.IPL
'the parents of the girl he is going to marry'

Next, we show examples of possessors expressed by substantivized expressions, with an attributive oblique stem:

(104) Ø-eyno-xo-zo-s moči
I-work-PRS-ATTR.OS-GEN1 space.ABS.III
'the place of the one who worked'
(105) y-ig-a-z-as ħal
II-good-OS-ATTR.OS-GEN1 health.ABS.III
'the health of the good one (female)'
(106) Ø-exu-r-ani-s murad
I-die-CAUS-MASD-GEN1 goal.ABS.III
'the goal to kill' (lit.: the goal of killing) (Imnajšvili 1963:238)

In principle, possessive phrases can be iterated indefinitely, although such recursive phrases are rare in naturally occurring discourse. Some examples:

(107) Ražbadin-zo halmaɣ-za-z ʕaƛo-s kid-ba-bi
Rajbaddin-GEN2 friend-PL.OS-GEN2 village-GEN1 girl-OS-PL.ABS.nIPL
'girls from Rajbaddin's friends' village'
(108) neła kid-b-ez eni-babiw-z ɣˤutka-z q'awari-ƛ'o
DEM.nI.OBL girl-OS-GEN2 parents-GEN2 house-GEN2 roof-SUPER.ESS
'on the roof of the house belonging to that girl's parents'

As these examples show, the genitive can express general possession, part-whole relationships, and some general affinity relations. Possessive phrases with the genitive are also used in proper names, with the genitive corresponding to the last name, and the head noun, to the first name. Thus:[8]

(109) a. ʕumaxan-is ʕumar
Umaxan-GEN1 Omar
'Omar Umaxanov'
b. karamazow-za-s es-na-bi
Karamazov- PL.OS-GEN1 sibling-PL-PL.ABS(.IPL)
'the brothers Karamazov'

Possessive phrases can also denote the author of some work, although in this particular function the genitive can alternate with a relative clause modifying the head noun. For example:

[8] See Ch. YYY for a description of the traditional clans known as *tuqum*'s.

(110) a. Tolstoy-a-s roman
Tolstoy-OS-GEN1 novel.ABS.II
'Tolstoy's novel'

b. Tolstoy-ä cāx-ru roman
Tolstoy-ERG write-PST.PTCP novel.ABS.II
'a/the novel written by Tolstoy'

Without a proper context, possessive expressions may be ambiguous:

(111) Mažid-e-s surat
Madjid-OS-GEN1 picture.ABS.III
'Madjid's picture'
(a picture of Madjid; a picture made by Madjid; a picture belonging to Madjid)

If two genitives with different meanings modify the same noun, their order is fixed: the genitive of possessor precedes the genitive of author. Unlike the recursive possessive phrases shown above, such phrases can have multiple direct genitives. For example, in (112b), the noun phrase is grammatical in the irrelevant meaning "the novel by the teacher that belongs to Tolstoy," and (112c) could mean something bizarre like "the novel by Tolstoy who belongs to the teacher."

(112) a. učitel-e-s Tolstoy-a-s roman
teacher-OS-GEN1 Tolstoy-OS-GEN1 novel.ABS.II
'the/a novel by Tolstoy that belongs to the teacher'

b. *Tolstoy-a-s učitel-e-s roman
Tolstoy-OS-GEN1 teacher-OS-GEN1 novel.ABS.II
'the/a novel by Tolstoy that belongs to the teacher'

c. *učitel-e-z Tolstoy-a-s roman
teacher-OS-GEN2 Tolstoy-OS-GEN1 novel.ABS.II
'the/a novel by Tolstoy that belongs to the teacher'

7.2 Adnominal genitive in the function of attributive modifier

A genitive can denote the source or material from which the referent of the head noun is made; for example:

(113) a. micxir-yo-s aka
silver-OS-GEN1 bracelet.ABS.III
'a silver bracelet'

b. gere-s t'as
iron-GEN1 washbasin.ABS.III
'an iron washbasin'

c. noxu-s ƛ'uˢ
straw-GEN1 roof.ABS.III
'a straw-covered roof'

d. izumrud-e-s šahar
emerald-OS-GEN1 city.ABS.III
'an emerald city'[9]

Such noun phrases can co-occur with a preceding genitive denoting possessor, with fixed order as discussed in section 5.1: the possessor genitive must precede the other genitive:

(114) a. [zair-e-s] [micxir-yo-s] aka
Zaira-OS-GEN1 silver-OS-GEN1 bracelet.ABS.III
POSSESSOR MATERIAL
'Zaira's silver bracelet'
b. *[micxir-yo-s] [zair-e-s] aka
silver-OS-GEN1 Zaira-OS-GEN1 bracelet.ABS.III

(115) a. [dä-z xex-za-s] [ɣun-o-s] q'uti
1SG-GEN2 child-OS-GEN1 tree-OS-GEN1 box.ABS.IV
POSSESSOR MATERIAL
'my children's wooden box'
b. *ɣun-o-s dä-z xex-za-s q'uti
tree-OS-GEN1 1SG-GEN2 child-OS-GEN1 box.ABS.IV

In the proverb in (116), the two possessor genitive phrases are expressed by substantivized participial constructions, and the genitives immediately preceding the head noun *dunyal* denote material:

(116) [B-od-a käƛ'i-ru-za-s] [hiso-s] dunyal,
III-do-INF learn-PST.PTCP-PL.OS-GEN1 wool-GEN1 world.ABS.III
[b-ac'-a käƛ'i-ru-za-s] [riłi-s] dunyal.
III-eat.TR-INF learn-PST.PTCP-PL.OS-GEN1 butter-GEN1 world.ABS.III
'Nothing ventured, nothing gained.' (lit.: the ones who learn how to make (things) get the woolen [~rich] world; the ones who learn how to eat get the butter world)

7.3 Measure phrases

There are no special constructions for measure phrases. Most of the things that normally fall into this category are expressed in Tsez by a noun phrase where the head noun, denoting unit or measure, follows the genitive form of the noun denoting the measured/quantified substance:

(117) substance-GEN unit-of-measure
MODIFIER HEAD NOUN

For example:

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[9] The Russian version of "The Wizard of Oz" was known as *Volšebnik izumrudnogo goroda* ("The Wizard from the Emerald City"), and the corresponding Tsez equivalent proudly exhibits its multiple genitive 1s:
(i) izumrud-e-s šahar-yo-s šeyx
emerald-OS-GEN1 city-OS-GEN1 wizard.ABS.I

(118) a. at’-e-s t’akan
flour-OS-GEN1 glass.ABS.II
‘a cup of flour’

b. hek’u-ya-s ixin
potato-OS-GEN1 bag.ABS.IV
‘a bag of potatoes’

c. benzin-yo-s litra
gasoline-OS-GEN1 liter.ABS.IV
‘a liter of gasoline’

d. heneš-yo-s kilo
apple-OS-GEN1 kilogram.ABS.II
‘a kilo of apples’

e. ša-de-s axu
wine-OS-GEN1 drop.ABS.II
‘a drop of wine’

f. pula-ya-s muhu
rice-OS-GEN1 seed. ABS.III
‘a grain of rice’

g. giba-s/ciyo-s ƛ’it’
sand-GEN1/salt-GEN1 piece.ABS.IV
‘a grain of sand/salt (lit.: a piece of sand/salt)’

h. bˤeƛ’-e-s reqen
sheep-OS-GEN1 herd.ABS.III
‘a herd of sheep’

i. xalq’i-mo-s q’oq’a
people-OS-GEN1 crowd.ABS.III
‘a crowd/a group of people’

This is the main strategy for encoding container measures, weights, or units of mass nouns such as sand or rice. Genitive measure phrases can be used interchangeably with equative phrases, where the measure/quantity appears as the equative modifier of the noun that denotes the substance being measured. Thus:

(119) unit-of-measure-EQUATIVE substance-GEN
MODIFIER HEAD NOUN

The minimal pair in (120) and (121) illustrates these two patterns; (120) is a measure phrase patterned on (117), and (121) is patterned on (119):

(120) bix-e-s q’ˤog
grass/hay-OS-GEN1 armful.ABS.IV
‘an armful of hay’

(121) q’ˤog-ce bix
armful-EQUAT grass/hay.ABS.IV
‘an armful of hay’

The following two examples illustrate a genitive phrase (122) and an equative modifier (123) producing the same measure phrase. The difference in the head nouns is reflected in agreement; in (122), the head noun is the unit of measure (‘cup’), modified by the genitive with a relative clause attached; in (123), it is the substance (‘blood’), which has two separate modifiers, the relative clause and the equative modifier:

(122) [[[Dä-z lagi-ł-äy b-oƛäx-ru] iyo-s] zok’i]
1SG-GEN2 body-CONT-ABL III-appear-PST.PTCP blood-GEN1 mug.ABS.IV
GENITIVE MODIFIER HEAD NOUN
lagi-q r-iħi-näy…
body-POSS.ESS IV-put-COND
‘If you spread a cup of blood from my body on your body… ‘

(123) [[Dä-z lagi-ł-äy b-oƛäx-ru] [zok’i-ce] iyo]
1SG-GEN2 body-CONT-ABL III-appear-PST.PTCP mug-EQUAT blood.ABS.III
RELATIVE CLAUSE MODIFIER EQU.MODIFIER HEAD NOUN
lagi-q b-iħi-näy…
body-POSS.ESS III-put-COND
‘If you spread a cup of blood from my body on your body… ‘ (ʕAliqilič:80)

The equative measure construction is used to denote abstract expressions of amount; such abstract expressions never appear in the genitive. Compare the following examples, which include expressions of distance (124) or time (125):

(124) a. Ħalt’uqan-z-ä q’ˤano kilometra-ce ec’no huni
worker-PL.OS-ERG two kilometer.ABS-EQUAT new road.ABS.IV
r-oy-s.
IV-do-PST.WIT
‘The workers built two kilometers of the new road.’

b. *Ħalt’uqan-z-ä ec’no huni-s q’ˤano kilometra
worker-PL.OS-ERG new road-GEN1 two kilometer
r-oy-s.
IV-do-PST.WIT

(125) a. T’o łˤora saʕat-yā-ce ħalt’i (yoł).
here three.OBL hour-IN.ESS-EQUAT work.ABS.III be.PRS
‘There are three hours of work here.’

b. *T’o ħalt’i-s łˤono saʕat (yoł).
here work-GEN1 three hour.ABS.III be.PRS

The following examples illustrate the use of the equative construction for amount expressions:

(126) ʕAli Ø-āš-ru-(łi-)ce Ø-iš-a k’ʷeze
Ali.ABS.I I-eat.INTR-PST.PTCP-NMLZ-EQUAT I-eat-INF.ABS.IV be able
r-äq dä-q.
IV-become.FUT 1SG-POSS.ESS
‘I can eat as much as Ali ate.’ (lit.: it is possible for me to eat…)

(127) ʕAl-ä hat'an-ƛ'o ħäƛi-ru-(ɬi-)ce
Ali-ERG Sunday-SUPER.ESS drink-PST.PTCP-NMLZ-EQUAT
ħaƛu-s ħuł nes-ä.
drink-PST.EVID yesterday DEM.I-ERG
'Yesterday he drank as much as Ali did on Sunday.'

7.4 Genitive forms of numerals

Genitive forms of numerals mainly combined with head nouns to express properties: figure/number, date, or size. For example:

(128) a. bišomr-a-s tarix
hundred-OS-GEN1 number.ABS.II
'the number 100' (lit.: the number of one hundred)
b. iłłir-a-s surat
six-OS-GEN1 picture.ABS.II
'the image of 6' (lit.: six's image)
c. q'unaqur-a-z razmer-a-de
forty-OS-GEN2 size-OS-APUD.ESS
'about size forty'

8 Nouns taking clausal complements

Head nouns such as 'news', 'story', 'rumor',[10] 'claim', 'fact', 'suggestion', and so on can take complement clauses; such nouns often but not always correspond to equivalent complement-clause-taking verbs. Clausal complements to nouns can be encoded in two main ways. First, finite clausal complement may be introduced by the quotative enclitic *–ƛin* (see the chapter on nominalizations for details). For example,

(129) [ža gulu-ƛ' zow-no-ƛin] xabar
DEM.ABS horse-SUPER.ESS climb-PST.nWIT-QUOT story
'the story/news that s/he rode a horse'

(130) [t'ok'ow b-ik'-ač'in-ƛin] r-exu-x-anu-si roži
any.more III-go-FUT.NEG-QUOT IV-die-PRS-NEG-ATTR word
'the firm (lit.: undying) promise that it [the rooster] won't go there anymore'
(Onočun mamalayn:24)

Such complements are possible but quite rare. One should be careful not to confuse them with quotative complements of complex verbs consisting of a nominal component such as 'promise', 'word', 'thought' plus a light verb. Complements of nouns cannot be separated from the head noun by material that does not belong in the same noun phrase. For instance, in (130), both the

[10] These three meanings are expressed by the common Tsez noun, *xabar*. In the glosses, we indicate the translation that is most appropriate in a given context.

complement clause and the modifier *rexuxanusi* 'undying' belong to the head noun *roži.*[11] By contrast, complement clauses selected by verbs can be dislocated from the head. In (131), the complement clause introduced by the enclitic *–ƛin* is separated from the noun *roži* by the ergative subject, which indicates that this clause is a complement of the complex verb *roži teƛ-* 'promise'.

(131) [Xexbi r-odi-näy mi äƛi-ru-∅ di-n
children.ABS.nIPL nIPL-do-COND 2SG.ERG say-PST.PTCP-ABS.IV 1SG.ERG-TOP
r-od-ān-ƛin] xedi-y-ä-n roži teƛ-no.
IV-do-FUT.DEF-QUOT husband-OS-ERG-TOP word.ABS.IV give-PST.nWIT
'If we have children, I will do what you say,' the husband promised.' (Ħasanno Ħusenno:7)

A much more common way of expressing a complement to a nominal head is through a nominalized participial clause, which attaches to the noun by a genitive, just as nominal modifiers do (see section 5).

Two participles can appear as predicates in nominalized clausal complements: the past participle in *–ru* and the present participle in *–xosi.* These participles also appear as predicates of relative clauses (see the chapter on relative clauses). A noun complement clause with a past participial predicate has the final nominalizer *–łi* (which can be omitted; see the chapter on complement clauses, section 5). The nominalized participial clause appears in the genitive, attached to the head noun. Whether or not the nominalizer is used, Tsez treats the resulting structure as a noun phrase; this suggests that (132a) is just an abbreviated version of (132b), with the nominalizer *-łi* omitted. The omission of the linking genitive after the suffix *-łi* is impossible, as shown in (132b):

(132) a. [xalq'i-mo-r mesed b-äsru]s xabar
people-OS-LAT gold.ABS.III III-find-PST.PTCP-GEN1 news
b. [xalq'i-mo-r mesed b-äsruł̣i]-*(s) xabar
people-OS-LAT gold.ABS.III III-find-PST.PTCP-NMLZ-GEN1 news
'the news/story that the people found gold'

(133) [Yodu qaca r-ay-ēr-ru]-s kaɣat
DEM firewood.ABS.IV IV-come-CAUS-PST.PTCP-GEN1 letter.ABS.II
neƛ elu-r.
give.IMPER 1SG-LAT
'Give us a letter that we brought you this firewood.' (Shaitli dialect, from Imnajšvili 1963:236)

If the nominalizer is not used, judgments on the acceptability of the non-genitive-linked variant are unclear; compare (132a, b) and (134).

[11] The order shown here is preferred, given that the complement clause is the longer segment, and such segments tend to appear at the left edge of the noun phrase (see section 9). Still, the opposite order, with the attributive modifier preceding the complement clause, is also possible.

(134) xalq'i-mo-r mesed b-äsru xabar
people-OS-LAT gold.ABS.III III-find-PST.PTCP news
'the news that the people found gold'

As with other genitive dependents of nouns, the genitive here shows case concord with the head noun; compare (132a, b), where the head noun is in the absolutive, and (135), where it is in an oblique case:

(135) xalq'i-mo-r mesed b-äsruł-z xabar-yo-ł
people-OS-LAT gold.ABS.III III-find-PST.PTCP-NMLZ-GEN2news-OS-CONT.ESS
'in the news/in the story that the people found gold'

If the predicate of the complement clause is a present participle, it can also combine with the nominalizing suffix *–łi*.[12] In such instances, the participle must appear in the oblique form, with the suffix *–z(o)-*, as shown below. Note that in (136), the complement-taking noun *xabar* is in the absolutive but only the oblique form of the participle is allowed. This morphological property sets complement clauses apart from relative clauses with the present-participial predicate; in the latter, the participle can appear in the direct form in *–si* if the head noun is in the absolutive. The substantival clause in *–zo(-łi)* is attached to the head noun by the genitive:

(136) a. yedu kamanda putbol-ye-r b-ˢeži-xo-zo-(łi-)s xabar
DEM team.ABS.IPL football-OS-LAT IPL-win-PRS-ATTR.OS-NMLZ-GEN1 news
'the news of this team winning in football'
b. *yedu kamanda putbol-ye-r b-ˢeži-xo-si-(łi-)s xabar
DEM team.ABS.IPL football-OS-LAT IPL-win-PRS-ATTR-NMLZ-GEN1 news

The similarity between relative clauses and complement clauses is well known cross-linguistically, and for some languages, it is possible that only one type of clause is used (see Matsumoto 1988, 1997 for be similar proposal concerning a potential syntactic identity between relative clauses and complement clauses in Japanese). In Tsez, however, the two types of clauses may be similar, but they are not identical.

9 Appositives

Appositive phrases are composed of two noun phrases, one of which expands or clarifies the meaning of the other, as in the English *you travelers* or *we the linguists*... We will refer to the identified portion (*you, we* in the English example) as the "antecedent", and the noun phrase that expands its meaning (*travelers, the linguists* in the English example) as the "identifier".

In Tsez appositive phrases, the antecedent appears in the absolutive, and the identifier appears in the case determined by its function in the clause. For example, in (137), *eli* is the antecedent, and *q'ˢuneł*, the identifier; in (138), we find two appositive phrases, one in the ergative case (*dey ɣˢway walizā*), the other in the absolutive (*yisi uži ˢisa*).

[12] As in (131), the suffix *łi* can be omitted.

(137) Yedu ħažat ānu-si šebin-no
DEM necessity be.NEG-ATTR thing.ABS.IV-TOP
eli q’ˢune-ł teł r-oq-si.
1PL.ABS. NIPL two.OS-CONT.ESS inside IV-become-PST.WIT
‘This unnecessary thing has happened between the two of us.’

(138) Dey ɣˢway wali-z-ä yisi uži ʕisa
1SG.GEN1 dog.ABS.III Wali-OS-ERG DEM boy.ABS.I Isa.ABS.I
ħan-si.
bite-PST.EVID
‘My dog, Wali, bit this boy, Isa.’

10 Coordination of nouns

Below, we will be using the term ‘coordinate structure’ to refer to a combination of two or more nouns linked by ‘and’ (conjunction) or ‘or’ (disjunction). Nouns in a coordinate structure can be expressed in any of the previously identified nominal forms: by a pronoun, by a head noun preceded by various modifiers, or by a nominalized verb phrase. Neither of the coordination strategies described below is exclusive to noun phrases; they are also used to coordinate adjectival phrases, adverbial phrases, and postpositional phrases, but not finite verbs.

Nominal coordinate structures with the conjunction ‘and’ are produced by appending the postnominal affix *–n(o)* to each coordinated element. Two or more nouns, or noun phrases, can be coordinated in this manner, provided that *–n(o)* is repeated on each coordinate (see also examples (29), (68)-(71), and (77)).

(139) di-n mi-n
1SG-and 2SG-and
‘you and I’

(140) ʕAli-z gulu-r-no mežu-z ziya-r-no
Ali-GEN2 horse-LAT-and 2PL-GEN2 cow-LAT-and
‘to Ali’s horse and your cow’

(141) ačit’-iłe-n ħon-iłe-n žek’u
pine-EQUAT-and mountain-EQUAT-and man.ABS.I
‘a man as tall as a pine and a mountain’

(142) eniw-ce-n esiw-ce-n kid
mother-EQUAT-and sibling-EQUAT-and girl.ABS.II
‘the girl same as her mother and sister’

(143) onoč-a-s q’oq’o-ni-n mamalay-e-s ˢoˢo-ni-n
hen-OS-GEN1 cluck-MASD-and rooster-OS-GEN1 crow-MASD-and
‘hen’s clucking and rooster’s crowing’

As (138)-(143) show, coordination with *–n(o)* is the same regardless of the grammatical form of the noun phrase, as it attaches to all case forms as well as to forms with the equative markers *–ce* and *-q’ay*. The coordinating particle always follows the case marker and other markers.

Disjunction is expressed by the particle *ya*, which precedes each subconstituent of the disjunction:

(144) a. ya di ya ža
or 1SG.ABS or DEM.ABS
'either I or s/he' (absolutive)

b. ya eni-y-ā ya babi-y-ā
or mother-OS-ERG or father-OS-ERG
'either Mother or Father' (ergative)

c. ya łā-d ya sap'on-yo-d
or water-INS or soap-OS-INS
'either with water or with soap'

As these examples demonstrate, the cases of the conjoined nouns must match; indeed, non-matching cases are not allowed in coordinate structures, regardless of whether the nouns are linked with 'and' or with 'or'. Consider the following ungrammatical examples.

(145) a. *ya eniw ya babi-y-ä
or mother.ABS.II or father-OS-ERG
('either Mother or Father')

b. *eni-y-ä-n babiw-no
mother-OS-ERG-and father.ABS.I-and
('Mother and Father')

c. *ʿali-r-no maduhal-qo-n
Ali-LAT-and neighbor-POSS.ESS-and
('to Ali and the neighbor')

d. *bahadur-no raɣ-mo-ł-no
brave man.ABS.I-and battle-OS-CONT.ESS-and
('a hero and in the midst of battle')

Example (145c) is particularly instructive: both lative and poss-essive case can be used to denote recipients (the difference between the two is determined by the permanence of the transfer — permanent transfer is associated with a lative recipient; temporary transfer with a poss-essive recipient), yet despite performing the same role in the clause, the two nouns cannot be combined in a coordinate structure. Additionally, example (145d) shows that, although postpositional phrases and some adverbial phrases can be coordinated (see also data in the chapter on adverbial phrase) noun phrases do not easily coordinate with either of these categories.

However, the identity requirement for nominal cases inside a coordinate structure only holds true for the core argument cases (absolutive, ergative, genitive, and lative). For cases outside this set, nouns in non-matching forms may conjoin. For example:

(146) ɣʿutk-o-q-no baɣ-mo-x-āz-a-n
house-OS-POSS.ESS-and orchard-OS-AD-DISTAL-IN.ESS-and
'around the house and behind the orchard'

(147) šahar-y-āy-no ˁaƛ-ā-ɣor-no
city-OS-IN.ABL-and village-IN-VERS-and
'away from the city and into the village'

This suggests a fundamental difference between core argument cases and spatial forms; the latter conjoin like adpositions rather than nouns (note that the English equivalents, which contain PPs, are also grammatical).

Within a coordinate structure, the leftmost noun binds the nouns on its right but not vice versa. A reflexive or personal pronoun with the focus enclitic *–tow* or the contrastive enclitic *–gon* cannot occur on the leftmost noun within a coordination.[13] These facts suggest that coordination in Tsez is asymmetrical, with the first conjunct binding any subsequent one(s).

(148) a. ɣ$^{w\text{ˁ}}$ay-no neła-s k'uci-bi-n
dog.ABS.III-and DEM.nI-GEN1 puppy-PL.ABS.nIPL-and
'a/the dog$_i$ and its$_{i/k}$ puppies'

b. ɣ$^{w\text{ˁ}}$ay-no neła-s-tow/nelä neła-s
dog.ABS.III-and DEM.nI-GEN1-FOC/REFL nI-GEN1
k'uci-bi-n
puppy-PL.ABS.nIPL-and
'a/the dog$_i$ and its$_i$ puppies'

c. neła-s k'uci-bi-n ɣ$^{w\text{ˁ}}$ay-no
DEM.nI-GEN1 puppy-PL.ABS.nIPL-and dog.ABS.III-and
'its$_{k/*i}$ puppies and a/the dog$_i$'

d. *nelä neła-s k'uci-bi-n ɣ$^{w\text{ˁ}}$ay-no
REFL nI-GEN1 puppy-PL.ABS.nIPL-and dog.ABS.III-and

(149) a. xan-no nesi-s-gon łˁono uži-n
king.ABS.I-and DEM.I-GEN1-CONTR.TOP three boy.ABS.I-and
'the king and his three sons' (the title of a fairy tale)

b. *nesi-s-gon łˁono uži-n xan-no
DEM.I-GEN1-CONTR.TOP three boy.ABS.I-and king.ABS.I-and

(150) a. ya sult'an ya nesi-s esiw
or Sultan.ABS.I or DEM.I-GEN1 sibling-ABS.(I)
'Sultan$_i$ or his$_{i/k}$ brother'

b. ya sult'an ya nesi-s-tow/nesä nesi-s esiw
or Sultan.ABS.I or DEM.I-GEN1-FOC/REFL.I-GEN sibling-ABS.(I)
'Sultan$_i$ or his$_i$ brother'

c. ya nesi-s esiw ya sult'an
or DEM.I-GEN1 sibling-ABS.(I) or Sultan.ABS.I
'his$_{k/*i}$ brother or Sultan$_i$'

d. *ya nesä nesi-s esiw ya sult'an
or REFL.I-GEN sibling-ABS.(I) or Sultan.ABS.I

[13] For details on dedicated reflexives and reflexive interpretations induced by the focus enclitic *–tow,* see CH. YY[BINDING].

11 Order of elements inside a noun phrase

Aside from demonstratives, genitives, and the various attributive forms described above, a head noun can also be modified by a relative clause. A detailed discussion of relative clauses is presented in a separate chapter; here we concern ourselves only with the order of the various modifiers inside a noun phrase. The typical order of modifiers in Tsez is fairly consistent with the order of adjectives proposed for adjectival hierarchies cross-linguistically (Dixon 1982; Sproat and Shih 1991; Cinque 1994), thus:

(151) Value > Size > Shape > Age > Color > Provenance > Purpose

The order shown in (151) is more of a tendency than a rigid hierarchy. Compare the following example, where the denotation of provenance can appear in at least two positions without a detectable difference in intonation:

(152) a. xiriyaw r-eɣe gelmaču cibaru
expensive IV-small round worn-out
c'uda-ni itali-ya-s ɣˢanaza-s čanta
red-DEF Italy-OS-GEN1 women-GEN1 bag.ABS.IV
b. itali-ya-s xiriyaw r-eɣe gelmaču cibaru
Italy-OS-GEN1 expensive IV-small round worn-out
c'uda-ni ɣˢanaza-s čanta
red-DEF women-GEN1 bag.ABS.IV
'an expensive small old round Italian-made red women's purse'

Of course, such heavily attributive expressions are rare; in naturally occurring discourse, one normally encounters a noun phrase with fewer modifiers.[14]

If a noun phrase includes a demonstrative and other modifiers, the demonstrative always appears at the left edge, even if the noun phrase includes a relative clause:

(153) a. yedu xiriyaw mašina
DEM expensive car.ABS.III
'this expensive car'
b. *xiriyaw yedu mašina
expensive DEM car.ABS.III
(154) a. yisi Tolstoy-ä cäx-ru(-ni) łena y-exora t'ek
DEM Tolstoy-ERG write-PST.PTCP-DEF five II-long book.ABS.II
'these five long books written by Tolstoy'
b. *Tolstoy-ä cäx-ru(-ni) yisi łena y-exora t'ek
Tolstoy-ERG write-PST.PTCP-DEF this five II-long book.ABS.II

Relative clauses typically appear before other modifiers but after demonstratives (see also special cases discussed in section 3.7.1). Consider the following examples:

[14] See sections 7.1 and 7.2 above for the relative order of some genitive forms.

(155) a. [iduɣor y-ik'i-xo-si] bercinaw kid
home II-go-PRS-ATTR beautiful girl.ABS.II
'a beautiful girl that was going home'

b. ??bercinaw [iduɣor y-ik'i-xo-si] kid
beautiful home II-go-PRS-ATTR girl.ABS.II
'a beautiful girl that was going home'

(156) a. [mi b-ädi-ru] b-aˁq'u ħurmat
2SG III-do-PST.PTCP III-many respect.ABS.III

b. ??/*b-aˁq'u [mi b-ädi-ru] ħurmat
III-many 2SG III-do-PST.PTCP respect.ABS.III
'many signs of respect that you paid me'

These tendencies in precedence are probably due to the size of the respective modifiers; as noted above, in general, longer modifiers tend to precede shorter ones, as shown by the following example where two adjectival phrases precede the numeral *sis* 'one':

(157) [xizor šila-bi yoł-äsi, ƛ'iri his-no
backward horn-PL.ABS.nIPL be.PRS-RES above spring.wool.ABS.IV-and
r-aqˁ-äsi] sis miƛ'i
IV-appear-RES.PTCP one ram.ABS.III
'one ram, with horns rolled in backwards and covered with newly grown wool'
(ˁAliqilič: 18)

Since relative clauses are generally longer than other modifiers, their tendency to appear on the left reflects the general long-before-short tendency found in Tsez and other head-final languages (cf. Yamashita and Chang 2001 and see the chapter on word order). An example of the same principle at work in a noun phrase with a clausal complement was shown above; cf. (130) and see footnote 13.

If a noun phrase includes a masdar relative clause and other modifiers, the relative clause must precede the other modifiers:

(158) a. [maˁqi-r b-ik'-ani-x] ħoliw huni
far-LAT IPL-go-MASD-AD.ESS broad road.ABS.IV
'a broad road to go far'

b. *ħoliw maˁqi-r b-ik'-ani-x huni
broad far-LAT IPL-go-MASD-AD.ESS road.ABS.IV

If a noun phrase includes an adnominal genitive of possession, that genitive typically appears at the left edge, as in (159), but following the demonstrative, as shown in (160):

(159) debi nece huinaw reƛ
2SG.GEN1 so.much delicious meat.ABS.IV
'your so-very-delicious meat' (ˁAliqilič:161)

(160) ža debi reƛ'iqoy
DEM 2SG.GEN1 glove.ABS.IV
'that glove of yours' (Xanes lˢono užin, sis kidno:30)

12 Discontinuous noun phrases

Discontinuous noun phrases are possible, but subject to several constraints that we outline below. For ease of exposition, we present two types of discontinuity separately: discontinuous genitives expressing possessor, and discontinuous attributive modifiers (demonstratives, adjectives, numerals, relative clauses).

12.1 Discontinuous adnominal genitive

Possessor genitives (in contrast to other genitive relations, discussed in section 5 above) can be separated from the head noun. Such discontinuity is dispreferred, but is not judged ungrammatical. It seems to be associated with a specific pragmatic context, namely contrastiveness of the genitive referent, which is why it is most accepted in contexts where such a contrast is made explicit, as in (161b):[15]

(161) a. Neła γʷˤay-ä [pat'i-s k'et'u] ħan-si.
DEM.nI dog-ERG Fatima-GEN1 cat.ABS.III bite-PST.WIT
'This dog bit Fatima's cat.'

b. [Pat'i-s] neła γʷˤay-ā [k'et'u-n] ħan-no
Fatima-GEN1 DEM.nI dog-ERG cat.ABS.III-and bite-CVB
[ˤali-z k'e't'u-q] mołu y-iħi-s.
Ali-GEN2 cat-POSS.ESS nail/claw.ABS.II II-put-PST.WIT
'Fatima's cat, this dog bit, and Ali's cat, it scratched.'

(162) a. [ˤali-s kid-ba-bi] bercinaw yoł.
Ali-GEN1 daughter-OS-ABS.nIPL beautiful be.PRS
'Ali's daughters are beautiful.'

b. [ˤali-s] bercinaw yoł [kid-ba-bi].
Ali-GEN1 beautiful be.PRS daughter-OS-ABS.nIPL
'Ali's daughters are beautiful.'

It is important to distinguish this type of discontinuity from constructions with external possessors expressed by the genitive, as in the example below (see also the chapter on basic clause types). In the external possessive construction, the genitive and the noun phrase associated with it do not form a constituent. This construction is limited to a small set of intransitive unaccusative predicates ('be', 'stay', 'become'). Discontinuous noun phrases, on the other hand, appear in clauses with all kinds of predicates.

(163) [Pat'i-s] idu [k'et'u] yoł.
Fatima-GEN1 at.home cat.ABS.III be.PRS
'Fatima has a cat at home.'

[15] Here and below, the relevant continuous and discontinuous constituents are shown in square brackets.

(164) [ʕAli-s] [bercinaw kid-ba-bi] zow-s.
Ali-GEN1 beautiful daughter-OS-ABS.nIpl be.PST-PST.WIT
'Ali had beautiful daughters.'

The discontinuity illustrated in (161b) and (162b) is subject to further restrictions. First, the displacement is unidirectional; the genitive has to precede the head noun it is separated from. Compare the grammatical example in (161b) to the ungrammatical discontinuity in the following example:

(165) *[k'et'u-n] neła γ^{w}ˢay-ā [pat'imat-is] ħan-no …
cat.ABS.III-and DEM.nI dog-ERG Fatima-GEN1 bite-CVB

Second, the genitive can separate from the head noun only if that noun appears in one of the core cases: absolutive or ergative. Compare the following two clauses:

(166) a. ?[Neła kid-be-z] t'ek [maduhal-ä] y-is-si.
DEM.nI girl-OS-GEN2 book.ABS.II neighbor-ERG II-take-PST.WIT
'This girl's neighbor took the book.'
b. *[Neła kid-be-z] t'ek [maduhal-q-āy] y-is-o.
DEM.nI girl-OS-GEN2 book.ABS.II neighbor-POSS-ABL II-take-IMPER
('Take the book from this girl's neighbor.')

One could hypothesize that the latter restriction is related to the difference between genuine cases, which are licensed by the verb, and cases introduced by an adposition present in the structure. Discontinuity, which is a case of subextraction, is only possible with verb-licensed noun phrases, where no adposition intervenes to block the extraction. However, the power of this explanation is complicated by the behavior of noun phrases in the lative. As we discuss in Ch. YY [Cases], lative is one of the spatial cases, and it combines freely with spatial forms indicating a given reference point (in-lative, super-lative, etc.). It can also combine directly with a noun, in which case it resembles the dative of more familiar languages, expressing a recipient or experiencer. When the lative-marked noun phrase denotes a recipient or experiencer, the discontinuity discussed in this section becomes marginally possible. Thus:

(167) a. ʕAl-ä [esiw-z qizanyo-r] γˢutku r-oy-s.
Ali-ERG sibling-GEN2 family-LAT house.ABS.IV IV-do-PST.WIT
b. ??[Esiw-z] ʕal-ä [qizanyo-r] γˢutku r-oy-s.
sibling-GEN2 Ali-ERG family-LAT house.ABS.IV IV-do-PST.WIT
'Ali built a house for his sibling's family.'

We are inclined to take this data point with caution, given that the judgment is marginal. However, the discontinuity in (167) may indicate that the Tsez lative form is gradually turning into an argument case in situations where it marks experiencer, goal, and recipient (and appears without any spatial marking). In these cases, the lative may possibly be licensed directly by a relevant predicate (such as predicates of transfer and some psychological state predicates); see Comrie and Polisky (1998) for similar considerations. Meanwhile, the lative that participates in the spatial system still remains very much a spatial case, licensed by an adposition. If this

hypothesis is on the right track, then a historically single case form is developing into two distinct yet homophonous case markers in the modern language. The permeability of lative-dative noun phrases to sub-scrambling, illustrated in (167b), then provides a counterexample to the idea that all experiencer noun phrases are licensed by an adposition (Landau 2010). If a universal experiencer-licensing adposition were present, we would incorrectly expect (167b) to be ungrammatical.

Discontinuous noun phrases are also possible when the genitive modifies the noun that is part of a complex predicate. For example, the intransitive predicate *rok'u roƛ-* 'worry about someone/something' consists of the noun *rok'u* 'heart' and the verb AGR-*oƛ-* 'be ill'. The experiencer is encoded by the genitive modifying *rok'u* and the stimulus appears in the ad-essive form. The genitive experiencer can be separated from *rok'u*, as in (168c):[16]

(168)	a.	Uži-x	[eniw-s	rok'u]	r-oƛ-xo.
		boy-AD.ESS	mother-GEN1	heart.ABS.IV	IV-be.ill-PRS
	b.	[Eniw-s	rok'u]	r-oƛ-xo	uži-x.
		mother-GEN1	heart.ABS.IV	IV-be.ill-PRS	boy-AD.ESS
	c.	[Eniw-s]	uži-x	[rok'u]	r-oƛ-xo.
		mother-GEN1	boy-AD.ESS	heart.ABS.IV	IV-be.ill-PRS

'Mother worries about the boy (son).'

In (169), the discontinuous genitive is separated from the absolutive object, which forms a complex transitive predicate with the light verb AGR-*od-* 'do':

(169) a. Xalq'i-m-ā [b-ˢeže-t'a-ni-za-s ħurmat]
people-OS-ERG IPL-old-DISTR-DEF- PL.OS-GEN1 respect.ABS.III
b-oy-x.
III-do-PRS
'People respect seniors.' (lit.: do the elders' respect)

b. [B-ˢeže-t'a-ni-za-s] xalq'i-m-ä [ħurmat]
IPL-old-DISTR-DEF- PL.OS-GEN1 people-OS-ERG respect.ABS.III
b-oy-x.
III-do-PRS
'People respect seniors.'

12.2 Other prenominal modifiers in discontinuous phrases

Prenominal modifiers other than the genitive of possession can also be separated from the head noun; candidates include demonstratives, adjectives, participial relative clauses, and numerals — i.e., the class of attributive modifiers. For example:

[16] See Ch. YY [ARG STR] for many more similar examples.

(170) [R-igu] r-oq-si [ɣudi].
IV-good IV-become-PST.WIT day.ABS.IV
'The weather is/has become good.'

(171) [Ažo-q b-izi-xosi] b-ukay-s [bikori].
tree-POSS.ESS III-rise-PRS.PTCP III-see-PST.WIT snake.ABS.III
'(He) saw a/the snake going up a tree.' (based on ʕAliqilič:109)

(172) Zow-n-ƛax [sis] ažo-ƛ q'ˤida b-ič'-äsi [ziru].
be.PST-PST.nWIT-QUOT one tree-SUB.ESS under III-stay-RES fox.ABS.III
'Once upon a time, there was a fox sitting under a tree.' (ɣˤʷadin, zirun:1)

(173) [Bečedaw žek'u-s] ɣud-ƛ'-āy ɣud-ƛ'o-r ħalaq'
rich man-GEN1 day-POSS-ABL day-POSS-LAT emaciated
Ø-oq-xo [užī] Ø-ik'i-x zow-n.
I-become-IPF.CVB boy.ABS.I I-go-IPF.CVB be.PST-PST.nWIT
'A rich man's son day after day continued to wither away.' (Allahes ašuni:12)

Just as we saw with discontinuous possessive phrases, we observe restrictions on discontinuity in attributive phrases. First, the displacement is unidirectional; the modifier has to precede the head noun it has separated from. Compare the grammatical example in (172) and the ungrammatical discontinuity in the following example:

(174) *Zow-n-ƛax [ziru] ažo-ƛ q'ˤida b-ič'-äsi [sis].
BE.PST-PST.nWIT-QUOT fox.ABS.III tree-SUB.ESS under III-stay-RES one

Second, the genitive can separate from the head noun only if that noun appears in the absolutive or ergative, or possibly the lative, case. Compare the following examples; as (175b) indicates, the sentence is grammatical when the noun phrase is contiguous:

(175) a. *[Bercinaw] b-ik'-ān [šahar-y-a-ɣor].
beautiful IPL-go-FUT.DEF city-OS-IN-VERS
b. [Bercinaw šahar-y-a-ɣor] b-ik'-ān.
IV-good city-OS-IN-VERS IPL-go-FUT.DEF
'(We) will go to a beautiful city.'

Additionally, there seems to be a preference for light modifiers in discontinuous phrases, although as the examples above attest, longer constituents can be displaced as well.

It is possible that discontinuous modifiers have become reinforced under influence from Russian, where discontinuous adjectival modifiers are quite common (see Zemskaja 1979; 2004; Fanselow and Féry in press). For example, the questions with discontinuous noun phrases below might be direct calques from the Russian question shown in (178b), or they might simply be coming into wider use under the influence of a comparable Russian structure. They still stand out; generally, Tsez does not permit discontinuity in wh-questions (see the chapter discussing interrogative clauses).

(176) a. Sasaq [didiw hawa-baq] r-oq-xosi (yoł)?
tomorrow what weather.ABS.IV iv-become-PRS.PTCP be.PRS

b. Sasaq [didiw]r-oq-xosi (yoł) [hawa=baq]?
tomorrow what IV-become-ABS.PRS.PTCP be.PRS weather.ABS.IV
'What will the weather be like tomorrow?'

(177) a. [Didiw γudi] yaqˢuł (yoł)?
what day.ABS.IV today be.PRS

b. [Didiw] yaqˢuł yoł [γudi]?
what today be.PRS day.ABS.IV
'What day is it today?'

(178) a. [Kakoj den′] segondja? *Russian*
what.ATTR.NOM day.NOM today

b. [Kakoj] segondja [den′]?
what.ATTR.NOM today day.NOM
'What day is it today?'

In conclusion, Tsez nouns phrases can include attributive or genitive-marked modifiers as well as modifying relative clauses. Noun phrases are strictly head-final, but the order of elements in the prenominal domain is not rigidly fixed. Discontinuous noun phrases are possible, but their distribution is constrained by the case of the head noun and the relative order of dislocated material: heads cannot precede their dependents. Within a noun phrase, we find grammatical marking for definiteness (on attributive modifiers), distributive marking, and case concord; this results in a situation where some (not all) modifiers appear either in a direct form (when the head noun is in the absolutive case) or an oblique form (when the head is in any other form).

Nominalizations

1 General remarks

In this chapter, we will consider deverbal nominal expressions, which include deverbal nouns in *–ni,* deverbal nouns in *–si/-zo* (derived from participles), infinitives, masdars, and clausal nominalizations in *–łi*. These expressions appear in the same positions as noun phrases (with individual differences in the distribution that we will discuss below) and internally all have the strict head-final order, with the predicate in the final position. Regardless of the details of their derivation, all deverbal nouns belong to gender IV, which is the gender for many abstract expressions. All the nominalizations discussed in this chapter can be coordinated in the same manner as simple nouns: with the enclitic *–n(o)* on each constituents for conjunction, and the proclitic *yā* on each constituent for disjunction. Such coordination is impossible for verbs proper—compare the coordination of masdars in (1) with the attempted coordination of finite verbs in (2b):

(1) ža berten-yo-ł-er goλ'-ani-x-no
DEM.ABS(.I) wedding-OS-CONT-LAT invite-MASD-AD.ESS-and
Ø-ay-ir-ani-x-no
I-come-CAUS-MASD-AD.ESS-and
'to invite him to the wedding and to bring (him there)'

(2) a. ʕAl-ä ža berten-yo-ł-er goλ'i-n
Ali-ERG DEM.ABS(.I) wedding-OS-CONT-LAT invite-PFV.CVB
Ø-ay-ir-si.
I-come-CAUS-PST.WIT
'Ali invited him to the wedding and brought (him there).' (lit.: having invited to the wedding, brought)

b. *ʕAl-ä ža berten-yo-ł-er goλ'i-s-no
Ali-ERG DEM.ABS(.I) wedding-OS-CONT-LAT invite-PST.WIT-and
Ø-ay-ir-si-n.
I-come-CAUS-PST.WIT-and

The expression of verbal arguments differs across nominalizations. For deverbal nouns in *–ni* and nominalized attributive forms in *–si/-zo,* the arguments inside the noun phrase have to appear in the genitive. All the other nominalizations preserve the argument case-marking of the verbs from which they derive; in other words, there is no difference between case encoding in these nomminalizations and the corresponding finite clauses.

2 Deverbal nouns in *–ni*

Deverbal nouns in *–ni* can be formed only from intransitive verbs, and their sole argument, if expressed, must appear in the genitive. This argument corresponds to the absolutive subject of the verbal base. Compare the intransitive sentence in (3) and the corresponding deverbal noun in (4):

(3) Dey k'icu laq'ƛa-x.
1SG.GEN1 tooth.ABS.II shake-PRS
'My tooth is loose. (lit.: shakes)

(4) (dä-z) k'icu-s laq'-ni
1SG-GEN2 tooth-GEN1 shake-DVB
'the shaking/looseness of (my) tooth'

The limitation of deverbal nouns to a subset of intransitives is not unique to Tsez. For instance, some Salish languages show a division between the nominalization of intransitive verbs (occurring with the sole argument expressed as possessor) and the nominalization of transitive and ditransitive verbs, which exhibit a sentential linking pattern (cf. Kuipers 1974:41-43 for Shuswap, and Kroeber 1999: Ch. 3 for the family in general).

Deverbal nouns in *–ni* can be modified by adjectives but not by adverbs. In (5), the verb *łeynad-* 'condition oneself (physically), get fit' occurs with the adverb AGR-*ig* 'well', but the corresponding deverbal noun takes the adjective AGR-*igu* 'good', as in (6). Note also that the adverb in (5) agrees with the absolutive argument in gender, while the adjective in (6) agrees with the deverbal noun.

(5) Uži Ø-ig łeynay-x.
boy.ABS.I I-well condition-PRS
'The boy exercises a great deal.'

(6) uži-s r-igu/*Ø-ig/*r-ig łey-ni
boy-GEN1 IV-good/I-well/IV-well condition-DVB
'the boy's good exercising'

If a noun is derived from an agreeing verb, the agreement is retained from the corresponding finite clause. For instance,

(7) a. Gulu b-eynay-x.
horse.ABS.III III-work-PRS
'The/A horse works/is working.'

b. Gulu-bi r-eynay-x.
horse-PL.ABS.nIPL nIPL-work-PRS
'(The) horses are working.'

(8) a. gulu-s b-ey-ni
horse-GEN1 III-work-DVB
'the/a horse's work/working'

b. gulu-za-s r-ey-ni
horse-PL.OS-GEN1 nIPL-work-DVB
'(the) horses' work/working'

Even if a deverbal noun agrees with the erstwhile absolutive in a gender other than IV, as in (8a), its own gender is fixed as IV.

Derivation with *–ni* is quite productive, but some intransitive verbs are considered awkward with this suffix. The main restriction has to do with whether the underlying verb is *process* denoting or *result* denoting (cf. Grimshaw 1990). If a process interpretation is readily available for the intransitive verb in question, the *-ni* nominalization is judged acceptable; if a process interpretation is dispreferred, such nominalizations are rejected. For example, deverbal nouns from verbs such as 'die', 'come', 'appear', 'become', or 'find' are considered incongruous. However, if the process interpretation can be contextually forced, the respective nominalizations become more acceptable. Consider the following example:

(9) ?nesi-s r-exora nex-ni
DEM.I-GEN1 IV-long come-DVB
'his long arrival'

Because of this requirement for a process interpretation, deverbal nouns formed from iterative verbs with the suffix *–nad-* are particularly common (compare AGR-*eyni* and *łeyni* above), although the suffix itself is never preserved in the nominalization. This, in turn may create an impression that *ni-* nominalizations are limited to unergative verbs (see CH. YY[Basic clause types]), but as we just noted, the main restriction is that the nominalization must have an event/process interpretation, which is orthogonal to unaccusativity. Unaccusative predicates that denote durative events, such as *quq-* 'dry', *at'iɬ-* 'become wet', *łico-* 'mix', AGR-*izi* 'rise', permit nominalization with *–ni.* For instance:

(10) šeƛ'u-s quq-ni
clothes-GEN1 dry-DVB
'the clothes' drying'
(11) cement-e-s łico-ni
cement-OS-GEN1 mix-DVB
'cement's being prepared' (lit.: mixing)
(12) magalu-s b-ˢaƛo-ni
bread-GEN1 III-become.stale-DVB
'bread's staling, getting stale'

A large number of deverbal nouns with *–ni* denote sounds, and the nominalization process can be used productively to create new sound-denoting words. The most common nouns in *–ni* and their corresponding verbs are listed below. In (13), we show verbs with meanings other than sound emission, while (14) presents sound-emission examples. In all these instances, the derivation is based on the verbal root, with suffixes (*–nad-, -ƛad-,* or *ƛ-*) omitted. Root-final *w* undergoes a change to *p* before *-ni;* cf. *ħapni* and *napni* below.

(13) AGR-et'- 'tear away' AGR-et-ni 'tearing away, escape'
ħaħaƛad- 'scratch oneself' ħaħa-ni 'scratching'
laxƛ-/laħƛ- 'move, shake' laħ-ni 'trembling, fear'
zeq'ƛ- 'twitch' zeq'-ni 'twitching; tantrum'
AGR-iš- 'eat (intr.)' AGR-iš-ni 'having a meal'
ƛaƛa- 'itch' ƛaƛa-ni 'itch(ing)'
qˢaroƛ- 'boil' qˢaro-ni 'boiling'

(14)	ƛ’awƛ- ‘slurp’	ƛ’ap-ni ‘slurping’
	ʕäʕänad- ‘cry, throw a tantrum’	ʕäʕä-ni ‘crying; temper tantrum’
	c’oc’oƛad- ‘suck’	c’oc’o-ni ‘sucking; sucking noise’
	čačaƛad- ‘scream, yell’	čača-ni ‘screaming’
	xirƛad- ‘sniffle’	xir-ni ‘sniffles; sniffling’
	didinad- ‘be annoying; make noise’	didi-ni ‘bothering, noise’
	łepnad- ‘sob’	łep-ni ‘sobbing’
	qoqoƛ- ‘laugh’	qoqo-ni ‘laughter’
	t’eknad- ‘tick’	t’ek-ni ‘ticking’
	lalada- ‘babble’	lala-ni ‘babbling’
	šepƛ-/šewƛ- ‘whisper’	šep-ni ‘whispering’
	bubuƛ- ‘mumble’	bub-ni ‘mumbling’
	ħeħƛ- ‘wheeze’	ħeħ-ni ‘wheezing’
	c’ek’ƛ- ‘chirr’	c’ek’-ni ‘chirring’
	ħarƛ- ‘snore’	ħar-ni ‘snoring’
	zuzuƛ- ‘buzz’	zuz-ni ‘buzzing’
	ruruƛ- ‘buzz’	ruru-ni ‘buzzing’
	imoƛ- ‘moo’	imo-ni ‘mooing’
	q’oq’oƛ- ‘cluck’	q’oq’o-ni ‘clucking’
	ħawƛ- ‘bark’	ħap-ni ‘barking’
	nawƛ- ‘meow’	nap-ni ‘meowing’
	ħiħiƛ- ‘neigh’	ħiħi-ni ‘neighing’
	ˁoˁoƛ- ‘bray; crow (as a rooster)’	ˁoˁo-ni ‘braying; crowing’
	bˁeʕeƛ- ‘bleat’	bˁeʕe-ni ‘bleating’
	q^{w}ˁarƛ- ‘oink’	q^{w}ˁar-ni ‘oinking’
	guruƛ- ‘howl’	gur(a)-ni ‘howling’
	q’^{w}ˁaq’^{w}ˁaƛ- ‘caw (as a crow); croak (as a frog)’	q’^{w}ˁaq’^{w}ˁa-ni ‘cawing; croaking’

Some deverbal nouns have acquired a particular meaning: for instance, *roƛni* ‘illness’ (from *roƛ-* ‘hurt’), *rˁečni* ‘vomit’. Finally, very occasionally, we find a deverbal nouns in *–ni* that appears to derive from a transitive verb: consider *caxni* ‘writing’ (derived from the transitive *cax-* ‘write’) and *čokni* ‘rinse’ (derived from the transitive *čokƛ-* ‘rinse’). There is evidence in these cases that the original verbs underwent detransitivization prior to denominalization: *caxni* takes only an agentive genitive, and no object can be expressed; conversely, *čokni* can only occur with the genitive of the object:

(15)	a.	ʕAli-s	caxni	
		Ali-GEN1	writing	
		‘Ali’s writing’		
	b.	*kaɣat-yo-s/kaɣat		caxni
		letter-OS-GEN1/letter.ABS.II		writing
		(‘the writing of a/the letter’)		
(16)	a.	haqu-s	čokni	
		mouth-GEN1	rinsing	
		‘the rinsing of mouth’		

b. *uži-s čokni
boy-GEN1 rinsing
('the boy's rinsing')[1]

Deverbal nouns in *–ni* cannot be derived from negative or optative verb forms, nor can they be derived from complex verbs.

Deverbal nouns in *–ni* have the same distribution as regular nouns, being able to appear in any position in the clause. Compare the use of deverbal nouns as an ergative subject and as an adjunct in the examples below:

(17) ħap-n-ä eli b-izi-r-x-ānu.
bark-DVB-ERG 1PL.ABS(.IPL) IPL-rise-CAUS-PRS-NEG
'Barking does not wake us up.'

(18) łep-ni-s payda šebi (yoł-ä)?
sob-DVB-GEN1 profit.ABS.III what.ABS be.PRS-INTERR
'There is no need to sob.' (lit.: What is the use of sobbing?)

3 Nominalizations in *–si/-zo*

3.1 Event nominalizations

Imnajšvili (1963:237) indicates that participles ending in the attributive suffix *–si* (direct form)/ *–zo* (oblique form) can be used as noun phrases, both in the affirmative and in the negative. He offers the following examples:[2]

(19) Cax-xo-zo aki-k'-si di.
write-PRS-ATTR.OS.ERG tired-TR-PST.WIT 1SG.ABS
'Writing tired me out.'

(20) Cax-xo-zo-q/cax-xo-zo-d aki-ł-si di.
write-PRS-ATTR.OS-POSS.ESS/write-PRS-ATTR.OS-INS tired-ITR-PST.WIT 1SG.ABS
'I got tired from writing.'

Such noun phrases are event nominalizations. These nominalizations are typically derived using the abstract nominalizing suffix *–łi*, although the suffix itself is frequently omitted. The forms below are preferred by our consultants over the examples in (19) and (20):

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[1] This phrase can be interpreted, incongruously, as "the rinsing of the boy (in smth)", which is consistent with (16a).

[2] The ergative in (19) appears to end in *–o*; however, this is simply the zero ending of the oblique stem. For most nouns, the ergative is identical to the in-essive, ending in *–ā/-ä*, but with some nouns, it takes the null ending (see CH.YY[case forms]). Nominalized forms in *–zo* normally have the null ending, although variation occurs even within a single text. For example, in the fairy tale "Bełiqanbi", we find both *esixozo* and *esixozā* 'the one who tells'. See also the variation in marking in (33a,b) and (34) below.

(21) Cax-xo-zo-ł-ā aki-k'-si di.
write-PRS-ATTR.OS-NMLZ-ERG tired-TR-PST.WIT 1SG.ABS
'Writing tired me out.'

(22) Cax-xo-zo-łi-q/cax-xo-zo-łi-d aki-ł-si
write-PRS-ATTR.OS-NMLZ-POSS.ESS/write-PRS-ATTR.OS-NMLZ-INS tired-ITR-PST.WIT
di.
1SG.ABS
'I got tired from writing.'

Among its many uses, the suffix *–łi* derives nominalized tensed clauses, which are discussed in section 6 below. However, the distribution of deverbal abstract nouns in *–si/-zo* (with or without *–łi*) is different from that of nominalized clauses. As we saw in (19) and
(21), derived nouns can appear as ergative subjects. Nominalized clauses cannot appear in this function. Nominalized clauses can include an object, but the addition of an object renders (19) and
(21) ungrammatical.

(23) *[Kaɣat cax-xo-zo-ł]-ā aki-k'-si di.
letter.ABS.II write-PRS-ATTR.OS-NMLZ-ERG tired-TR-PST.WIT 1SG.ABS
('Writing a letter tired me out.')

However either of the core arguments of a transitive verb can be represented in the nominalization if expressed by the genitive. Compare (23) and the following examples; in (24), the object of 'write' is expressed by the genitive, and in (25), it is the subject:

(24) [Kaɣat-yo-z cax-xo-zo-ł]-ā aki-k'-si
letter-OS-GEN2 write-PRS-ATTR.OS-NMLZ-ERG tired-TR-PST.WIT
di.
1SG.ABS
'The writing of a/the letter tired me out.'

(25) [Užis cax-x-ānu-si(-łi)] eniw-z rok'-ƛ'o
boy-GEN1 write-PRS-NEG-ATTR(-NMLZ) mother-GEN2 heart-SUPER.ESS
nexi-ł-xo.
come-ITR-PRS
'The son's not writing saddens Mother.' (lit.: comes upon Mother's heart)

Two genitives in the same nominalization are impossible; since only one argument can be represented by the genitive in such deverbal nouns, that noun's status as an agent or patient may be ambiguous out of context, as in the following example:

(26) Madina nesi-z Ø-aƛ'ir-zo-ƛ'o ħayran
Madina.ABS.II DEM.I-GEN2 I-deceive-ATTR.OS-SUPER.ESS surprised
y-oq-si.
II-become-PST.WIT
'Madina was surprised by his deception.' (he is the deceiver)
'Madina was surprised by his being deceived.'

Deverbal nouns in *–si/-zo* cannot be derived from complex verbs with a nominal component, even if that nominal component is in the genitive:

(27) *Eniw kumak/kumak-yo-z b-odi-x-zo-ƛ'o
mother.ABS.II help.ABS.III/help-OS-GEN2 III-do-PRS-ATTR.OS-SUPER.ESS
ɣˁaɣˁu y-izi-x.
happy II-rise-PRS
('Mother is happy because of being helped/helping.')

However, complex verbs consisting of a non-nominal component and a light verb can produce event nominalizations. Compare the verb ɣˁaɣˁu AGR-iz- 'be happy' (lit.: happy rise), shown in (27), with its event nominalization in (28):

(28) Eniw-z ɣˁaɣˁu y-izi-xo-zo kid ɣˁaɣˁu
mother-GEN2 happy II-rise-PRS-ATTR.OS.ERG girl.ABS.II happy
y-izi-r-xo.
II-rise-CAUS-PRS
'Mother's being happy makes the daughter happy.'

Like nominalizations in *–ni,* event nominalizations can combine with adjectives, but not adverbs. For example:

(29) Žuka/*žuk cax-xo-zo aki-k'-si di.
bad/badly write-PRS-ATTR.OS.ERG tired-TR-PST.WIT 1SG.ABS
'Bad writing tired me out.'
NOT: 'Writing badly tired me out.'

Event nominalizations in *–si/-zo* are very rare. We have not observed them in texts, and although they are accepted in elicitations, speakers prefer clausal nominalizations in *–łi*, discussed in section 6 below.

3.2 Participant nominalizations

The suffix *–si/-zo*, often followed by the definite suffix *–ni,* can be used to derive nouns denoting objects or persons as well as events. When deriving event nominalizations, *-si/-zo* combines with verbs only; when deriving entity nominalizations, it combines with a much wider range of categories: other nouns (30), noun phrases (31), adverbs (32), adjectives, numerals, and verbs (33).[3] Typically *-si/-zo* appears on the attributive modifier of a head noun ('person', 'thing', etc.); the head noun itself can also be omitted, in which case the substantivized modifier combines with case markers directly. For instance,

(30) meši-za-xo-zo-r
calf-PL.OS-PRS-ATTR.OS-LAT
'to the calf shepherd' (lit.: to the (one) at calves)

[3] This example shows two different forms of the ergative—see footnote 2 above.

(31) ok'-xo-si-n-e-ƛ'
nail-PRS-ATTR-DEF-OS-SUPER.ESS
'over the place where the nail is'

(32) waħħo-si-ni-de
down-ATTR-DEF-APUD.ESS
'next to the one down below'

(33) a. Ø-oƛƛo-xo-zo eƛi-n…
I-be.in.the.middle-PRS-ATTR.OS.ERG say-PST.nWIT

b. Ø-oƛƛo-xo-zo-n-ä eƛi-n…
I-be.in.the.middle-PRS-ATTR.OS-DEF-ERG say-PST.nWIT
'the middle one said…'

These examples suggest that noun phrases in *–si/-zo* are simply relative clauses with a null head. Consistent with the general properties of participial relative clauses (see Ch. YY [relative clauses]), such expressions preserve the argument structure of the verb they are derived from. For example,

(34) Heresi mec esi-xo-z-ā/esi-xo-zo
deceitful language.ABS.III tell-PRS-ATTR.OS-ERG/tell-PRS-ATTR.OS.ERG
eƛi-n…
say-PST.nWIT
'The liar said…' (lit.: the one telling lies)' (Bełiganbi:5,14)

Since these apparent nominalizations are relative clauses, it is also understandable that they can include adverbs. Compare example (29) above and the following example:

(35) Žuk cax-xo-zo žuk t'et'er-xo.
badly write-PRS-ATTR.OS.ERG badly study-PRS
'The one who writes badly studies badly.'

4 Infinitive and infinitival clauses

Affirmative infinitival predicates end in *–a*, which is affixed to the last consonant of the stem. The negative form of the infinitive is *-ā(n)č'i,* but sometimes the converbal negation *–(n)č'ey* is used in its place.

Infinitival clauses employ the same case marking as finite clauses. Thus, a finite verb that takes an ergative agent and absolutive patient takes the same argument structure when used as an infinitive, and so on. Agreement in infinitival clauses also parallels that of finite clauses in occurring with the absolutive argument alone. Some examples:

(36) rek-ä ħišimuku r-aˢɣ-a
key-ERG lock.ABS.IV IV-open-INF
'for the/a key to open the/a door'

(37) xexza-r ecno-ni igruška šuƛ'-a
children-LAT new-DEF toy.ABS.IV forget-INF

'for the children to forget (about) the new toy'

(38) debe-q ʕiƛ'u y-izi-r-oł-a
2sg-POSS.ESS lid.ABS.II II-rise-CAUS-POT-INF
'for you to lift the/a lid'

(39) nesi-q xabar es-oł-āči
DEM.I-POSS.ESS news.ABS.III say-POT-NEG.INF
'for him not to tell the news'

Infinitival clauses can include adverbs, as shown in (40). Adjectives can be used inside infinitiveal clauses to modify a noun (if there is an appropriate one), but not the infinitive itself. In (41), *bigu* can be interpreted only as a modifier of *keč'*:

(40) b-ig keč' qaƛ-a
III-well song.ABS.III sing-INF
'to sing well'

(41) b-igu keč' qaƛ-a
III-good song.ABS.III sing-INF
'to sing a good song'

Infinitival clauses are widely used in several functions: as complements of impersonal, raising and control verbs (see CH.YY[Clausal complements]); as relative clauses (see CH.YY [relative clauses]); and as exclamatives (see CH. YY[exclamatives]). However, they do not appear as ergative subjects or as complements of adpositions, as they cannot combine with any overt case markers.

The infinitive of the verb 'be' has different forms depending on tense/aspect: *yoła* for present/progressive and *zowa* for non-present/completive in the affirmative; *ānu* for present and *zowānč'i/zownč'ey* for past in the negative. Whereas the verb 'be' is commonly omitted as a copula or auxiliary in root clauses, it has to be preserved in infinitival clauses. For example:

(42) neło-ƛ' cax-äsi yoł-a
DEM.nI-SUPER.ESS write-RES be.PRS-INF
'to be written on it'

(43) doxtur-łun zow-a
doctor-as be.PST-INF
'to have been (worked as) a doctor'

It is not uncommon to find the verb AGR-*oq*- 'become' functioning as a copula or light verb in masdar and infinitival clauses as well. In most cases, the interpretation of AGR-*oq*- as a copula is very close to the interpretation of 'be'. Compare the example in (43) where 'be' is used, and the example below, which shows the use of AGR-*oq*- :

(44) šopir-łi-łun b-oq-a
driver-NMLZ-as IPL-become-INF
'to be drivers' (of several people, with a group that includes males)

5 Masdars and masdar clauses

The Arabic term *masdar* 'verbal noun' is widely used in the Caucasiological literature to denote non-finite verb forms that combine verbal and nominal properties. For Tsez, the verbal properties of masdars include (i) finite-clause-type argument marking and agreement, (ii) co-occurrence with adverbs rather than adjectives, (iii) the availability of optative marking, and (iv) the availability of negation. The primary nominal characteristic of masdars is their ability to appear with case-marking; as we show below, masdars can appear in a number of cases but not in the absolutive. Furthermore, masdars can combine with particles that do not occur with finite verbs, such as *-ƛa, -gon, -tow*, etc.

Masdar predicates in the affirmative can be derived from infinitives by adding the suffix *–ni,* which we already saw in section 2. The affirmative masdar suffix *–ani* is presumably derived from the combination of the infinitival suffix *–a* and the definite suffix *–ni*, although synchronically the suffix is no longer compositional. In the negative, the suffix expands to *–ā(n)č'ini* or *–(n)č'ey* (the latter is probably transferred to masdars from converbal clauses).

Some examples of masdar clauses:

(45) eli sid-qo sis b-iɬ-ani
1PL.ABS.IPL one-POSS.ESS one IPL-be similar-MASD
'our being similar to each other'

(46) dey rok'u r-iq'ˤ-ani
1SG.GEN heart.ABS.IV IV-approach-MASD
'my heart being calm'

(47) ɣuɣay-mo eniw moƛ-a-x-āy č'ari-k'-ānč'ini
noise-OS.ERG mother.ABS.II dream-OS-AD-ABL wake-TR-MASD.NEG
'noise not waking Mother up from her sleep'

Like infinitival clauses, masdar clauses can be modified by adverbs, but not adjectives:

(48) [Adab žuk/*žuka b-exu-r-ānč'ini]-r Ø-äk'i-n mi
respect.ABS.II badly/bad III-die-CAUS-MASD.NEG-LAT I-go-PROH 2SG.ABS(.I)
elo-r!
there-LAT
'So that you would not break the rules badly, don't go there.'

The similarity between infinitival clauses and masdar clauses goes beyond their suffixal and adverbial parallels; the two types of clauses have similar (but not identical) distributions in that both can serve as relative clauses (Ch. YY[relative clauses]) and also as complements of control verbs (CH. YY[Clausal complements]). Unlike infinitives, however, masdars clearly specify goal-oriented events. This interpretation prevents them from appearing as complements of impersonal and raising predicates (see CH. YY[clausal complements]).

Masdar clauses never appear in the absolutive case; for (45) through (47) to be integrated into clause structure, the masdar predicate has to bear one of the oblique cases: typically genitive, lative, ad-essive, or cont-lative. In the examples below, masdar clauses are shown in brackets.

(49) [Neł' boc'-ā Ø-exu-r-ani]-z murad-yo-ƛ'
DEM.nI.OBL wolf-ERG I-die-CAUS-MASD-GEN2 goal-SUPER.ESS
Ø-egir-āsi zew-no xan-ā že uži.
I-send-RES AUX.PST-PST.nWIT king-ERG DEM boy.ABS.I
'The king sent that boy with the goal of having him killed by the wolf.' (lit.: … the wolf him killing's goal) (Imnajšvili 1963:238)[4]

(50) Xan-ä yedu … im-yo-qo-r y-ici-n
king-ERG DEM.ABS(.II) pole-OS-POSS-LAT II-tie-PST.nWIT
[puħ-ä-za Ø-ik'i-Ø-äk'i-ru žek'-ä nocu
side-IN.ESS-DIST I-go-I-go-PST.PTCP person-ERG saliva.ABS.II
caƛ-ani]-ƛ-äy.
throw-MASD-SUB-ABL
'The king tied her to a pole so that (any) person walking by could spit at her.' (Beqes ʕUneyzat:55)

(51) Di raziyaw yoł [nesi uži-x kid
1SG.ABS(.I) agreeing be.PRS DEM.I.OS boy-AD.ESS girl.ABS.II
y-egir-ani]-ƛ'.
II-send-MASD-SUPER.ESS
'I agree to betroth (lit.: send) the girl to this boy.' (Imnajšvili 1963:238)

(52) [Ø-exw-ani]-q-āy Ø-ok'eƛ-si.
I-die-MASD-POSS-ABL I-run-PST.WIT
'I escaped death (lit.: run away from dying).' (Imnajšvili 1963:238)

(53) [Nes-ä b-ac'-ani]-qo-r/b-ac'-ani]-ƛ'o-r Ø-ezu mi!
DEM.I-ERG III-eat-MASD-POSS-LAT/III-eat-MASD-SUPER-LAT I-look.IMPER 2SG
'Watch what he is going to eat!' (based on Imnajšvili 1963:238)

(54) Že uži [beƛi b-iqir-ani]-ƛ'o-r
DEM boy.ABS.I game.ABS.III III-catch-MASD-SUPER-LAT
ruhun Ø-oq-no.
learn I-become-PST.nWIT
'That boy has learned to hunt wild game.' (based on Imnajšvili 1963:238)

(55) Ok'-xo-si-ni moči paƛi-x zew-s
nail-PRS-ATTR-DEF place.ABS.III fill-IPFV.CVB AUX.PST-PST.WIT
[čangerey-e-r r-iy-āč'ini]-ƛ-āy.
Chan-Girey-OS-LAT IV-know-MASD.NEG-SUB-ABL
'He was filling the place where the nail was so that it would not be known to Chan-Girey.' (Imnajšvili 1963:237)

(56) [Yed-ä qʕirič' k'ed-ani]-łe-r Ø-oq-no.
DEM.I-ERG scissors.ABS.IV look.for-MASD-CONT-LAT I-begin-PST.nWIT
'He began to look for scissors.' (Bilq'isdi:26)

[4] Imnajšvili (1963:238) presents this example with genitive 1 on the masdar clause, which seems to be a typo.

The lative and ad-essive forms, which seem to be interchangeable, are most common with masdar nominalizations. These forms appear in control complements, adjunct purpose clauses, and masdar relative clauses, as illustrated below:

(57) Eniw razi y-oq-xo zow-n-ānu
mother.ABS.II agreeing II-become-PRS AUX.PST-PST.nWIT-NEG
[ža sid-xo-kin y-egir-ani]-x.
DEM.ABS(.II) one-AD.ESS-FOC II-send-MASD-AD.ESS
'Mother refused to give her to anyone in marriage.' (Allahes ašuni:11)

(58) Dahaw-gon ʕiyad mi [mow nex^{w}-ani]-r.
a.little-CONTR.TOP cry.IMPER 2SG tear.ABS.II come-MASD-LAT
'You cry a little so that a tear would drop (come out).' (ʕAliqilič:44)

(59) Mi [dä-de-r b-iħad-ani]-x b-oq
2SG.ABS.III 1SG-APUD-LAT III-fight-MASD-AD.ESS III-become.IMPER
maħor!
outside
'Come outside to fight with me!' (addressing a dragon) (ʕAliqilič:186)

(60) [Mežu-q es-ani]-x kesu dä-q λexu-s.
2PL-POSS.ESS tell-MASD-AD.ESS tale.ABS.III 1SG-POSS.ESS remain-PST.WIT
'I have a story to tell you.'

However, masdar clauses cannot be used as ergative subjects. Compare the grammatical example in (61) with a regular noun phrase and the ungrammatical one in (62) with the masdar clause in the ergative:

(61) Yiła kes-ä uži-za-q siskin moʕłi-x-ānu.
DEM tale-ERG boy-PL.OS-POSS.ESS anything.ABS.IV teach-PRS-NEG
'This story is not going to teach the boys anything.'

(62) *[Nes-ä kesu es-an]-ä uži-za-q
DEM.I-ERG tale.ABS.III tell-MASD-AD.ESS boy-PL.OS-POSS.ESS
siskin moʕłi-x-ānu.
anything.ABS.IV teach-PRS-NEG
('Telling this story is not going to teach the boys anything.')

6 Nominalizations in *-łi*

The suffix *–łi* derives abstract nouns from nouns, adjectives, adverbs/postpositions, and numerals (see CH.YY [Noun derivation]). It is also used to derive clausal nominalizations when it attaches to a past or present participle. For example, the clause in (63) is nominalized and embedded under the verb *čuqʕ*- in (64). Note that the predicate 'be' starts out in the present tense form, but is turned into a past (perfective) participle, which is then nominalized. The nominalized clause preserves the case marking of the original finite clause.

(63) Ža bašiqʕoy neła kid-be-z baši-ł-si yoł.
DEM ring.ABS.IV DEM.nI.OS girl-OS-GEN2 finger-CONT-ESS-ATTR be.PRS
'This ring is from that girl's finger.'

(64) Uži-r suƛƛi-tow čuqˁ-no [ža bašiqˁoy
boy-LAT suddenly-FOC understand-PST.nWIT DEM ring.ABS.IV
neła kid-be-z baši-ł-si yäł-ru-łi].
DEM.nI.OS girl-OS-GEN2 finger-CONT-ESS-ATTR be.PRS-PST.PTCP-NMLZ
'The boy suddenly realized that this ring was from that girl's finger.' (Bašiqˁoy:44)

Example (65) shows a predicate in the present tense, and (66) provides its nominalized form:

(65) Dey qoqoƛu marha-ƛ' r-egir-xo.
1SG.GEN1 laughter.ABS.IV fable-SUPER.ESS IV-send-PRS
'I am laughing at a tall tale.'
(66) [Dey qoqoƛu marha-ƛ' r-egir-xosi-łi]
1SG.GEN1 laughter.ABS.IV fable-SUPER.ESS IV-send-PRS.PTCP-NMLZ
debe-r r-iy-x.
2SG-LAT IV-know-PRS
'You know that I am laughing at a tall tale.'

In (67), the predicate is in the unwitnessed past, and the embedded clause contains the nominalized past participle in the cont-ablative form:

(67) Bikor-ä nesi-z gug-y-ä kuła r-oy-n.
snake-ERG DEM.I-GEN2 back-OS-IN.ESS sleeve.ABS.IV IV-do-PST.nWIT
'The snake tricked him.' (lit.: made a sleeve in his back)
(68) Bełiqan-ä žedu-q [didur bikor-ä nesi-z
hunter-ERG DEM.IPL-POSS.ESS how snake-ERG DEM.I-GEN2
gug-y-ä kuła r-ay-ru-[zo]-ł-äy] esi-n.
back-OS-IN.ESS sleeve.ABS.IV IV-do-PST.PTCP-NMLZ-CONT-ABL tell-PST.nWIt
'The hunter told them how the snake had tricked him.' (Sadaq'a:16)

Nominalizations with the past participle are much more common than nominalizations with the present participle; it appears that the use of the past participle is the default, while the present participle is used in nominalizations to emphasize the ongoing character of an event. Tsez does not have sequence of tenses, so the tense of the nominalization is interpreted relative to the tense of the embedding predicate.

Nominalized clauses appear in a wide variety of functions: as complements of verbs (mostly verbs of cognition and perception, as shown in (64) and (66)), as adjuncts, and as complements to nouns such as 'news', 'rumor', 'fact', 'puzzle', and so on (see Ch. YY [Noun phrase]). The first of these uses is the most common.

(69) Yiz-ä [nes-ä äƛi-ru-łi]-xo-r rekar-bi
DEM.nIPL-ERG DEM.I-ERG ask-PST.PTCP-NMLZ-AD-LAT key-PL.ABS.nIPL
yisi-qo-r teƛ-no.
DEM.I-POSS-LAT give-PST.nWIT
'Because he was asking, they gave him the keys.' (based on Kidbes hunar:54)

(70) Eniw [uži Ø-āy-ru-łi]-ƛ’ ɣˀaɣˀu
mother.ABS.II boy.ABS.I I-come-PST.PTCP-NMLZ-SUPER.ESS happy
y-izi-n.
II-rise-PST.nWIT
‘Mother was happy that the son arrived.’ (lit.: on the son’s arriving)

(71) [wˀałe-r Ø-oq-zey ʕiyay-x Ø-oq-xosi
downward-LAT I-become-DUR.II.CVB cry-IPFV.CVB I-become-PRS.PTCP
yāł-ru-łi]-s ʕalamałi
AUX.PRS-PST.PRTCP-NMLZ-GEN1 puzzle
‘the puzzle about what it is that one cries when going down’ (Sis xan:5)

(72) [sis-sis insan ʕaq’lu ānu-si Ø-ači-xosi-łi]-s k’uli
some person.ABS.I sense be.PRS.NEG-ATTR I-stay-PRS.PTCP-NMLZ-GEN1 news
‘the news that some people have no common sense’

Despite their wide range of functions, nominalized clauses in *–łi* cannot appear in the ergative or absolutive subject position. For instance, the following sentences are ungrammatical:

(73) *[Yedu kamanda putbol-ye-r b-ˀäži-ru-łi]
DEM team.ABS.IPL football-OS-LAT IPL-win-PST.PTCP-NMLZ
xabar ānu.
news be.PRS.NEG
(‘That this team won in football is not news.’)

(74) *[Uži Ø-āy-ru-ł]-ä eniw ɣˀaɣˀu
boy.ABS.I I-come-PST.PTCP-NMLZ-ERG mother.ABS.II happy
y-izi-r-si.
II-rise-CAUS-PST.WIT
(‘That the son arrived made Mother happy.’)

This restriction has nothing to do with the abstract suffix itself, as abstract nouns are generally permitted in the subject position. For example, (75) illustrates an ergative subject, and (76), an absolutive subject expressed by an abstract noun:

(75) Nesi-z ħadur-ł-ä nesä nesi-r kumak b-oy-x.
DEM.I-GEN2 ready-NMLZ-ERG REFL.I-LAT help.ABS.III III-do-PRS
‘His preparation helps him.’

(76) Č’alʕin-łi łiy-s.
bored-NMLZ be.over-PST.WIT
‘The boredom is gone.’

The suffix *–łi* in nominalized clauses is often omitted, which may give an impression that these clauses are simply participial. However, Tsez treats the nominalized structure as a noun phrase, which means that when it is attached to a head noun there is a linking genitive, as illustrated in (71) and (72).

Nominalized clauses with *–łi* differ from infinitival and masdar clauses in their lack of transparency. Their constituents cannot be bound from the matrix clause, and they do not interact

scopally with material in the higher clause (see CH. YY[Agreement] for details). Negation in the matrix clause cannot license negative polarity items in the nominalized clause; for example, in (77), the negation on the matrix predicate does not license *didurkin* in the nominalized clause:

(77) *Nesi-q neł-ä [didur-kin eƛ-a r-āy-xosi
DEM.I-POSS.ESS DEM.nI-ERG how-FOC say-INF IV-must-PRS.PTCP
yäł-ru-łi] moˁłi-nč'i.
be.PRS-PST.PTCP-NMLZ teach-PST.WIT.NEG
('She did not teach him how to say anything.')

This opacity in *-łi* nominalizations sets them apart from infinitives and masdars, which are fully transparent (consider the material in sections 4 and 5 above).

To summarize the data discussed in this chapter, we present the main nominalization types and their properties in the following table.

Table 1. Tsez nominalizations

	Restrictions on derivational base	**Case marking on arguments**	**Nominal properties**	**Transparency**
Deverbal noun in *–ni*	Can be derived only from a subset of intransitive verbs with a process interpretation	Genitive	Same as underived nouns	No
Event nominalization in *–si/-zo*	Cannot be derived from complex verbs with a nominal component	Genitive	Same as underived nouns	No
Participant nominalization in *–si/-zo*	None	Same as in the finite clause	Same as underived nouns	No
Infinitive	None	Same as in the finite clause	Appears as complement of control/raising verbs or as adjunct purpose clause; cannot be ergative subject	Yes
Masdar	None	Same as in the finite clause	Occurs with case marking; appears as complement of control verbs; cannot be ergative subject	Yes
Nominalization in *–łi*	None	Same as in the finite clause	Appears as clausal complement; cannot be ergative subject	No

Predicate phrase

1 General remarks

The predicate phrase can consist of a verb alone, with the verb being simplex or complex; it can also be expressed by a series of verbs forming a complex verbal predicate, or by a copula with a predicative component. The head of a predicate phrase appears in a tensed form in finite clauses, in a converbal form in converbal clauses, in a participial or masdar/infinitive form in relative clauses, and in a nominalized form in complement clauses (see CH.YY[Clausal complements]). Regardless of finiteness, the predicate agrees with the absolutive argument in gender and number (for those verbs that have an agreement marking slot—see CH.YY[VERB MORPH]). There are no dedicated markers of a predicate phrase. In non-finite clauses, the linear position of the predicate is strictly determined: it must appear clause-finally. In root clauses, the finite predicate phrase can appear in any position (see CH.YY[Word order]).

In this chapter, we will first discuss different types of predicates and then address the marking of grammatical categories on predicates in finite and dependent clauses.

2 Verbal predicates

2.1 Simplex verbs

Intransitive, transitive, ditransitive and polytransitive verbs can form a predicate phrase in root and embedded clauses. All verbs agree with the absolutive argument, and with the exception of the biabsolutive construction, there can be only one absolutive argument per clause. For examples of intransitive, transitive, ditransitive and polytransitive clauses, see CH.YY[Basic clause types].

2.2 Compound verbs

Tsez has a number of verbs that consist of two simplex verbs juxtaposed in a single predicate (such compounding is indicated by the = sign). If both elements of a compound verb have an agreement slot, they both show agreement. However, only the last verb in a compound can be inflected with (non-)finite affixes or combine with the causative suffix. Thus, from the standpoint of predicate phrase formation, such compounds are not different from simplex verbs.

Consider the following example, where the compound verb is AGR-*iži*=AGR-*oɣ*-:

(1) Eniw q’ˤim-ä y-iži=y-oɣ-xo.
mother.ABS.II head-ERG II-carry-II-pull-PRS
‘Mother has a headache.’ (lit.: the head carries-pulls mother)

In the examples below, the predicate phrase is AGR-*ay*=*tix*- (lit.: come=set), and only the first constituent of the compound shows agreement. Only the second constituent carries the causative suffix:

(2) a. Xalq'i bat'-bat'iyaw mečo-ƛ' b-ay=tix-si.
people.ABS.IPL different.RED place-SUPER.ESS IPL-spread
'People settled over many different places.'

b. ħukmat-y-ä xalq'i-mo-ł xabar b-etintow
government-OS-ERG people-OS-CONT.ESS story.ABS.III III-on.purpose
b-ay=tix-er-xo/*b-ay-r=tix-er-si.
III-spread-CAUS-PRS/III-come-CAUS-set-CAUS-PRS
'The government spreads rumors among the people on purpose.'

The following compound verbs are used regularly. While the list below is representative, it is not exhaustive, since new compound verbs can be created using the same method; in addition, we do not show causatives that can be derived from these verbs.

(3)	a.	AGR-aƛ'=ʕaƛ'ir- speak=cheat	'chatter, jabber'	[ABS]
	b.	AGR-aˢƛa=k'ič'- saddle=load	'load up (usu. of a horse, mule)	[ERG, ABS]
	c.	AGR-egi=AGR-et'ur- be.loose=pull	'separate; steal'	[ERG, ABS]
	d.	AGR-ezu=AGR-oƛ'- look=stop	'look over, scan' 'watch, take care of'	[ABS, SUPER-ESS] [ABS, LAT]
	e.	AGR-et'u=k'oƛ'- tear.away=run	'run around; jump'	[ABS]
	f.	AGR-eħna=AGR-ik'- walk=go	'behave; be well-behaved'	[ABS]
	g.	AGR-izi=AGR-aƛ'- rise=fall	'rest'	[ABS]
	h.	AGR-iš=AGR-ut- eat=turn	'eat'	[ABS]
	i.	AGR-iš=ħaƛ- eat=drink	'carouse'	[ABS]
	j.	AGR-oƛi=AGR-eg- hurt=split	'split, splinter'	[ABS]
	k.	gaga=cagari- be.slippery=be.even	'be smooth, even'	[ABS]
	l.	caƛi=AGR-oƛ'- throw=stop	'throw around, scatter'	[ERG, ABS]
	m.	AGR-ˢoƛ'u=AGR-izi- stop=rise	'stumble'	[ABS]
	n.	AGR-iħu=AGR-ič- go.in=stay	'go back'	[ABS]
	o.	k'ek'=AGR-ik'- move=go	'swing'	[ABS]
	p.	k'oƛi=c'ox- run=get.stuck	'run iteratively'	[ABS]

2.3 Complex verbs

Complex verbs are composed of a predicative part and a light verb. The intransitive light verb is AGR-*oq*- 'become', the transitive light verb is AGR-*od*- 'do', and the ditransitive light verb is 'give' (*teƛ*- and *neƛ*-, depending on the direction of transfer).

The predicative complement can be represented by an adjective, participle, adverb/postposition, borrowed verb (mostly Avar and Russian verbs), or noun. In term of morphosyntax, the main contrast is between predicative nouns in the absolutive form and all other categories. The inclusion of an absolutive noun in a complex predicate affects the valency of the light verb, because that predicative noun obligatorily counts as its absolutive argument. Meanwhile, non-nominal predicative complements or nouns in non-absolutive form do not change verbal valency.

To illustrate, let us consider the light verb AGR-*od*- 'do', which is transitive. If this verb combines with a noun in the absolutive, the nominal predicative complement appears as its absolutive object. The resulting complex verb is transitive, with the object position already occupied; the verb agrees with the absolutive object. It then takes an ergative subject. For example, the verb AGR-*od*- combines with the noun *ʕumru* 'life' to form the complex verb *ʕumru bod*- 'live', whose subject appears in the ergative:

(4) a. El-ä b-ig ʕumru b-oy-x.
1PL-ERG III-well life.ABS.III III-do-PRS
'We live well.' (lit.: we do life well)

b. El-ä b-igu ʕumru b-oy-x.
1PL-ERG III-good life.ABS.III III-do-PRS
'We lead a good life.'

If the corresponding event structure calls for yet another participant, that participant must be expressed in a non-absolutive case. In the next example, the same light verb combines with the noun *kumak/kumek* 'help', takes it as the absolutive object, and agrees with it. The event structure of "help" presupposes the agent (helper) and the recipient of the helping. This recipient could presumably be expressed as the object of the verb, but since the absolutive object position is already taken, the tertiary participant cannot appear in the absolutive (5a). It is instead expressed by a noun phrase in the lative (5b). A common strategy is to express the additional argument as the possessor of the absolutive subject or object in the complex verb, as shown in (5c); since this possessor phrase modifies the absolutive noun phrase, it is always in the genitive 1 form.[1]

(5) a. *Ramazan-ä ƛirba kumak
Ramazan-ERG guest.ABS.I/II help.ABS.III
b-oy-s/Ø-oy-s/y-oy-s.
III-do-PST.WIT/ I-do-PST.WIT/II-do-PST.WIT
('Ramazan helped the guest.')

[1] The acceptability of genitive possessors with complex verbs varies across lexical items; for example, with *kumak bod*- the preference is for the lative (as in (5b)).

b. Ramazan-ä ƛirba-r kumak b-oy-s.
Ramazan-ERG guest-LAT help.ABS.III III-do-PST.WIT
'Ramazan helped the guest.'

c. Ramazan-ä ƛirba-s kumak b-oy-s.
Ramazan-ERG guest-GEN1 help.ABS.III III-do-PST.WIT
'Ramazan helped the guest.' (less preferred than (b))

Let us now consider the light verb AGR-*oq*- 'become'. Since this verb is intransitive, the appearance of an absolutive predicative nominal fills its sole valency. If another argument is presupposed by the corresponding event structure, it has to be expressed in one of the oblique cases or as the adnominal genitive of the predicative nominal. Consider the complex verb *asar boq*- 'be influential; be consequential', where *asar* is a noun in gender III. If this verb is used in a clause that also includes the mention of the source of influence, that source should appear as a genitive, and the target of influence is in a local case:

(6) B-ˢeže xalq'i-mo-r b-oq-xo kino-s asar.
III-big people-OS-LAT III-become-PRS movie-GEN1 influence.ABS.III
'Cinema has a great deal of influence on people.'

When a complex verb is composed of a noun in non-absolutive form or any other category combined with a light verb, no valency change happens. Extremely common among such predicative elements are Avar verbs, which are typically borrowed in the infinitival form, ending in *–zi/-ze*; the agreement necessitated by Avar is not reflected in such borrowings.

Compare the examples above and the combination of AGR-*od*- with the Avar loan *bak'ar(i)zi* 'accumulate, collect'. The resulting complex verb remains transitive and can take an absolutive object. The agreement on the complex verb now depends on the gender of the specific object it takes:

(7) a. Nes-ä posu[2] bak'arzi r-oy-s.
DEM.I-ERG wealth.ABS.IV collect IV-do-PST.WIT
'He accumulated wealth.'

b. Micxir-yo-ł šuš-ani-r-ä nece-gon
money-OS-CONT.ESS bury-MASD-LAT-INTERR so.much-CONTR.TOP
ža bak'arzi b-oy-x?
DEM.ABS(.III) collect III-do-PRS
'You can't take it with you when you die.'
(lit.: Are you accumulating it so that you would be buried in all that money?)

In the next example, the complex verb is composed of an Avar borrowing and the light verb AGR-*oq*, which agrees with the absolutive subject in gender I. In addition, the complex verb in the relative clause, *halag* AGR-*od*- 'excite, lead to commotion' is composed of the light verb

[2] The word *posu* literally means 'cattle' but it is typically used to refer to material wealth.

AGR-*od*- and the predicative component *halag,* which does not determine agreement on the verb; the verb agrees with the head noun (the subject of the matrix clause) in gender I:

(8) ʕIšq'-ä halag Ø-ädi-ru ʕoloqan žek'u
passion-ERG excited I-do-PST.PTCP young person.ABS.I
darsi-mo-ƛ'o-r-ä reʕizi Ø-oq-xo?
lesson-OS-SUPER-LAT-INTERR manage I-become-PRS
'Is it possible for a young man consumed by love to have time for his studies?' (ʕArabuzan:21)

Russian loans are clearly on the rise, and their use with AGR-*od*- and AGR-*oq*- is very productive. This is a recent development that has resulted from the growing use of Russian among Tsez speakers. Imnajšvili (1963: 254-255) notes and discusses Avar loans but hardly mentions any Russian loans as predicative components in complex verbs. The transitivity of a borrowed item in the source language does not matter; for instance, in (9) and (10), the Russian verb is intransitive, marked with the reflexive *-sja* (*somnevat'sja* 'doubt') but it can be used in a complex transitive verb as well:

(9) Ža samnewatsa Ø-oq-xo.
DEM.ABS(.I) hesitate I-become-PRS
'He is not sure.'

(10) Neł-ä mi samnewatsa y-oy-n.
DEM.nI-ERG 2SG.ABS(.II) hesitate II-do-PST.nWIT
'She made you (speaking to a woman) hesitant.'

The advent of Russian borrowings has led to the development of complex verb doublets, the interpretive differences among which are not always clear. Compare *kumak bod*- 'help', which appeared above, and *pamagat* AGR-*od*- 'help', from the Russian infinitive *pomogat'* 'help':[3]

(11) Kid-b-ä eniw pamagat y-oy-x.
girl-OS-ERG mother.ABS.II help II-do-PRS
'The girl helps Mother.'

Aside from infinitives, predicative complements that do not elicit agreement include Avar and Arabic borrowings which are used adverbially or attributively; for example, *ruhun* AGR-*od*- 'teach' and *ruhun* AGR-*oq*- 'learn' (*ruhun* is a converbal form of the verb 'learn' in Avar), *ħalal* AGR-*od*- 'allow' and *ħalal* AGR-*oq*- 'be possible, be allowed' (from Arabic *ḥalāl* 'permissible').

In the next example, the light verb AGR-*oq*- combines with the adverb/postposition *ƛ'irāy* to form the complex verb 'forgive'. This verb takes an absolutive subject (the agent of forgiving) and an oblique object (the recipient of forgiveness); the inclusion of the adverb does not affect the valency of the intransitive AGR-*oq*-.

[3] Note that the Russian verb takes a dative object, so one could expect the Tsez complex verb to take the absolutive and lative, but instead it appears as a standard ergative-absolutive predicate.

(12) Eniw debe-ƛ’ ƛ’iräy y-oq-xo.
mother.ABS.II 2SG-SUPER.ESS from.above II-become-PRS
‘Mother forgives you.’

Only the synchronic status of a predicative component in Tsez matters for the purposes of the nominal vs. non-nominal distinction, not its original status in some other language or at an earlier stage of Tsez. For example, in the complex verb *maħrum* AGR-*oda* ‘deprive’, *maħrum* is treated as a non-nominal predicative complement, although the original Arabic word may have entered the language as an adjective or as a noun (*maħru:m* ‘deprived’). In *mišayat bod-* ‘disturb, interfere with’, the Russian loan is actually a verb form but it is treated as a gender III noun for the purposes of complex verb formation.

Complex verbs with the agreed-with predicative absolutive differ from the rest of complex verbs in the degree to which the predicative complement is tied to its light verb. Predicative absolutive complements can have their own modifiers, most often genitive (5c), but others as well (see (4b)), while non-nominal complements cannot. Absolutive predicative complements can be separated from their light verbs, whereas for all the other predicative complements, such separation is judged very awkward. Compare the following examples based on the material presented above:

(13) a. T’o b-oy-x ʕumru el-ä.
here III-do-PRS life.ABS.III 1PL-ERG
‘We live here.’ (compare (4))
b. ʕUmru el-ä b-oy-x t’o.
life.ABS.III 1PL-ERG III-do-PRS here
‘Here, we live.’ (implies contrast with a different activity in another location)
(14) a. *Y-oq-xo ƛ’irāy debe-ƛ’ eniw.
II-become-PRS from.above 2SG-LAT mother.ABS.II
b. *ƛ’irāy eniw y-oq-xo debe-ƛ’.
from.above mother.ABS.II II-become-PRS 2SG-LAT
(‘Mother forgives you.’) (compare (12))

Finally, as the next example demonstrates, complex verbs can be non-compositional; consider the psych-collocation in the next example:

(15) Rok’u-ł g^{w}andi y-oq-si.
heart-CONT.ESS pit.ABS.II II-become-PST.WIT
‘Sadness occurred.’ (lit: a pit in the heart happened/began)

It is sometimes hard to draw the line between semantically transparent and non-compositional complex verbs. Other examples of complex verbs with at-least-partially obscured semantics are given below (cases other than the absolutive subcategorized for by a given complex verb are given in brackets):

(16) Intransitive

a.	rok'u	r-ay-		[GEN, SUPER-ESS]
	heart.ABS.IV	IV-come		
	'believe, trust'			
b.	rok'u	r-ex-		[GEN, SUPER-ESS]
	heart.ABS.IV	IV-die		
	'regret'			
c.	rok'u	madaħar	r-oq-	[GEN, SUB-ABL]
	heart.ABS.IV	outside	IV-become	
	'be disgusting'			

(17) Transitive

a.	rok'-ƛ'o	AGR-is-		[ERG, ABS]
	heart-SUPER.ESS	take		
	'remember'			
b.	xot'-āy	łi	ħaƛ-	[ERG, GEN2]
	leg/foot-IN.ABL	water.ABS.III	drink	
	'obey s.o.'			

(18) Ditransitive

a.	ʕazab	teƛ-	[ERG, LAT]
	torture.ABS.III	give-	
	'torture'		
b.	iyaħ	neƛ-	[ERG, LAT]
	patience.ABS.III	give-	
	'try hard'		

3 Restructuring predicate phrases

Complex predicate phrases can be formed by restructuring verbs, including the following: AGR-*ay*- 'must'; the modal AGR-*äsu*- 'may'; the verb AGR-*oq*- in the modal meaning 'can, be able to'; the complex modal *behizi* AGR-*oq*- 'can; be allowed to'; the verb AGR-*ič*- in the meaning 'continue', the verb *xec*- 'leave; allow', the verb AGR-*et*- in the meaning 'want', and the specialized use of the verb AGR-*esu*- 'appear' in conditionals. These verbs combine with a predicate (simplex or complex verbal predicate; copular predicate) to form a complex predicate phrase. For example, as a freestanding verb, AGR-*āy*- 'must' takes an absolutive clausal argument, while as a restructuring predicate, it shares the arguments of the verb it combines with; thus, in (19, 20), it takes an ergative and absolutive DP argument and agrees with the absolutive:

(19)	[Nes-ä	yedu	t'ek	t'et'r-a]	[r-āy].
	[DEM.I-ERG	DEM	book.ABS.II	read-INF].ABS.IV	IV-must
			CLAUSAL ARGUMENT		PREDICATE PHRASE
	'He must read this book.'				

(20)	[Nes-ä]	[yedu	t'ek]	[t'et'r-a	y-āy].
	DEM.I-ERG	DEM	book.ABS.II	read-INF	II-must
	SUBJECT	OBJECT		PREDICATE PHRASE	
	'He must read this book.'				

For restructuring clauses, see CH. YY[Clausal complements].

4 Copular predicates

Copular constructions are formed with the verbs ‘be’, AGR-*oq*- ‘become’, and AGR-*ič*- ‘stay’. The verb ‘be’ is irregular; its present tense form is *yoł* in the affirmative and *ānu* in the negative; in the past forms, the stem *zow*- is used, which receives standard endings of tense and negation. ‘Be’ does not have a future form, and the relevant notion is expressed either by the present tense, or by the future tense of the other two copular verbs.

The syntax of copular clauses is discussed in CH. YY [Basic clause types]; here we will concentrate on the internal composition of predicate phrases with a copula.

The predicative complement of a copula can be expressed by a noun phrase (noun, pronoun, proper name, infinitival or masdar clause) or a modifier phrase (numeral, adjective, participle, or demonstrative).

4.1 Predicate phrase with a predicate nominal

Predicate nominals are expressed by a noun phrase in the absolutive. In the examples below, we show predicate phrases in brackets:

(21) A: [Šebi zow-ä] ža?
what.ABS be.PST-PST.WIT.INTERR DEM.ABS
‘What was that?’
B: (Ža) [di zow-s].
DEM.ABS 1SG.ABS be.PST-PST.WIT
‘That was me.’
B’: (Ža) [žedu zow-s].
DEM.ABS DEM.PL.ABS be.PST-PST.WIT
‘That was them.’

(22) Debe-r šebi y-eti-xo-si [ža yoł].
2SG-LAT who.ABS(.II) II-like-PRS-ATTR DEM.ABS(.II) be.PRS
‘Who you really like is her.’

(23) [Sida λeba-s xexbi (yoł)] di-n Abakar-no
one.OBL year-GEN1 children.ABS be.PRS 1SG.ABS-and Abakar.ABS-and
maħamarasul-no.
Mohammedrasul.ABS-and
‘I, Abakar, and Mohammedrasul are contemporaries (lit.: children of one year).’

An infinitival phrase can also be a predicate nominal; if a copula shows agreement, it always agrees with that phrase in gender IV. Note that in the following example, the referent of the implicit subject of the infinitive is a female, and the infinitive shows gender II agreement, but the copula AGR-*ič*- shows agreement in gender IV.

(24) Debi ħalt'i [ʕaƛ-ā-ɣor y-ik'-a r-ič-as].
2SG.GEN1 work.ABS.III village-IN-VERS II-go-INF IV-stay-FUT
'Your job will be to go to the village.'

A masdar clause in the function of a predicate nominal appears in the lative or ad-essive form. Compare (24) and (25):

(25) Debi ħalt'i [ʕaƛ-ā-ɣor y-ik'-ani-x r-ič-as].
2SG.GEN1 work.ABS.III village-IN-VERS II-go-MASD-AD.ESS IV-stay-FUT
'Your job will be to go to the village.'

Predicate nominals can also be expressed by nouns, pronouns, or demonstratives in a non-absolutive form. For example, statements about possessive attribution feature a predicate nominal in the genitive:

(26) Yedu t'ek debi/muʕalim-e-s yoł?
DEM book.ABS.II 2SG.GEN1/teacher-OS-GEN1 be.PRS
'Is this book yours/the teacher's?'

Copular predicates can also include adverbs/postpositions in the predicative function. In those instances, the postpositional phrase includes an implicit nominal complement, and such a complement can also be made explicit. Consider (27) and (28) and see also CH.YY [Adverbial phrase] for a discussion of the adverb–postposition ambiguity.

(27) łi (q'oc'oƛ-ā) teł yoł.
water.ABS.IV barrel-IN.ESS inside be.PRS
'Water is inside (the barrel).'

(28) Cey (im-yo-ƛ') ƛ'iri zow-s.
eagle.ABS.III tree-OS-SUPER.ESS above be.PST-PST.WIT
'The eagle was above/on the tree.'

4.2 Predicate phrase with a predicate attributive

An adjective, participle/participial relative clause, numeral, or attributive demonstrative can combine with a copula to form a predicate phrase with a predicate attributive. All these forms can also function as adnominal modifiers, and there is no difference between the forms that are used predicatively and the ones that are used adnominally. Definite adjectives can occur both attributively and predicatively. Collective numerals, marked with *–n(o),* are also possible in the predicative position. Examples (29b) and (30b) illustrate the use of predicative adjectives in the regular and definite form, respectively.

(29) a. sadaqaw baha
equal price.ABS
'same price'

b. Eli [sadaqaw yoł].
1PL.ABS equal be.PRS
'We are the same age (lit.: same).'

(30) a. sadaqaw-ni ziya
equal-DEF cow.ABS
'a cow of the same age'

b. Yizi ziya-bi [sadaqaw-ni zow-s].
DEM cow-PL.ABS.nIPL equal-DEF be.PST-PST.WIT
'These cows were the same (in some respect).'

The following example shows the use of a numeral in the predicative function. Note that when the numeral modifies the head noun, as in (31a), the noun is not marked for plural (see CH.YY[Noun phrase]), but when the numeral occurs predicatively (in (31b)) the corresponding subject is in the plural.

(31) a. łeno kid
five girl
'five girls'

b. Neła-s kid-ba-bi [łeno zow-s].
DEM.nI-GEN1 girl-OS-PL.ABS.nIPL five be.PST-PST.WIT
'She had five daughters.' (lit.: her girls were five)

If an attributive form can show agreement, it agrees with the subject of the copular clause (see also CH. YY[Basic clause types]).

5 Grammatical categories expressed in the predicate phrase

The following table shows the grammatical categories of a Tsez verb. All predicate phrases, be they dependent or finite, can be marked for agreement, causative, potential modality, negation, and Aktionsart (iterative marking); thus, slots -1 through 5 are filled in predicate phrases in both finite and non-finite form. The following categories can be expressed only on finite predicates: tense, mood (optative/non-optative), evidentiality, and polarity (slots 6-10). For the relevant categories and their marking, see CH. YY.

Table 1. Verbal form: Grammatical categories and their slots

-1	0	1	2	3	4	5	6	7	8	9	10
Agree-ment	Stem	Causa-tive	Aktions-art	Modal-ity	Low negation	Non-finite-ness	Mood	Tense	High negation	Evident-iality	Polar-ity
I-IV sg IPL/ nIPL		-Vr-[1] -k'-	Iterative/ Absence of iterat-ive	Potential/ unspecified		Infinitive Masdar Pst.ptcp	Optative/ unspecified	Past Pres Fut		Witnessed/ Non-witness-ed	Decl Interr Imper

[1] Can be iterated.

Attributives: Adjectival phrases and the expression of comparison

1 General remarks

An adjectival phrase consists of the head attributive expression, preceded optionally by degree expressions and complements (provided that the adjective/attributive expression is a complement-taking one). Predicative adjectives are discussed mainly in Ch. YY, YY, and YY [PredP; Basic clause types; Agreement], but see also below for the discussion of comparatives and superlatives.

The boundary between adjectives and participles is rather fluid, so it is possible that some adjectives are actually participles (see Ch. YY [Adjective formation]) or are diachronically related to participles. Consider some examples where the distinction between adjective and participle is not clear:

(1)	a.	č'uräsi	(č'ur-a)
		bright	shine-INF
	b.	AGR-iyäsi	(AGR-iy-a)
		ripe	ripen-INF
	c.	AGR-ic'äsi	(AGR-ic'-a)
		full	become full/fill up.INTR-INF

Examples (2a-f) list non-derived adjectives with meaning typically associated with adjectival semantics. This list is by no means exhaustive and is given mainly for illustrative purposes. Note also that some of the meanings associated with adjectives (for example: material, source) can be expressed by the genitive form of a relevant noun—see Ch. YY [Noun phrase].

(2) a. Color terms
aluk'a 'white'
qˤaba 'black'
c'uda 'red'
ič'iw/ič'iy 'yellow'
niga 'blue; navy blue; green'
asbiłe 'light blue'
ečya(si) 'green'
zira 'gray'
ɣˤač'i 'motley-colored'
sasiw 'dark'

b. Age and size terms
AGR-*ˢeɣe* ‘young; small’
AGR-*ˢeže* ‘big; grown; old’
AGR-*ečru* ‘old’
AGR-*exora* ‘tall, long’
k’ot’ono ‘short (in length or height)’
AGR-e*čiw*/AGR-e*čiy* ‘fat’
t’erenaw ‘thin, lean’
dadaru ‘thin, not thick’
ħolyu/ħoliw ‘thick, wide’

c. Temperature terms
AGR-*oč’iw* ‘cold’
tatanu ‘warm’

d. Terms referring to strength and health
zap’ana ‘strong’
toxaw ‘weak’
saɣaw ‘healthy’
roƛnoxu ‘sick, ill’
untaraw ‘ill’

e. Shape terms
AGR-*uxxor* ‘direct, straight’
ašiw ‘flat’
q’ic’iramu ‘square’
gelmač’u ‘round’
wˢak’ana ‘bent, crooked, uneven’

f. Assessment terms
AGR-*igu* ‘good’
žuka ‘bad’
bercinaw ‘beautiful, pretty’
suruƛaw ‘ugly, unattractive’
AGR-*oˢq’iw*/AGR-*oˢq’yu* ‘difficult; heavy’
kikiw/kikyu ‘lightweight’
piharaw ‘easy’

A number of adjectives are borrowed from Avar, with frozen gender agreement markers; such adjectives can be recognized by the ending *-aw* (cf. *bercinaw* or *t’erenaw* above). These adjectives do not show gender agreement in Tsez.[1]

[1] In Avar, most adjectives show gender agreement suffixally, with the four singular gender markers *–w, -y, -b,* and *–l.* Some adjectives, however, combine suffixal gender markers with prefixal ones (*w-, y-, b-*, and *r-,* correspondingly).

Tsez also uses a productive strategy of attributive derivation, where any form other than a finite verb (or the absolutive form of the noun—see below) can be made into an attributive modifier via the addition of the suffix *–si* (see Ch. YY [Morphology] for details and CH. YY[Noun phrase] for more examples). Some examples of derived attributives, which we will refer to as adjectives, for consistency, are shown below. Adjectives can derive from non-absolutive forms of common nouns, from place names, from numerals, or from adverbs (in the examples below, we show adjectives modifying nouns). We have not observed any derivation of adjectives from absolutive nominal forms (except, of course, in cases where the absolutive form and the oblique stem are the same).

(3) derived attributives

a. sasa-qo-si zaman
morning-SUPER.ESS-ATTR time.ABS.III
'morning, morning time'

b. xan-de-si raʕat'atel
khan-APUD.ESS-ATTR servant.ABS.I
'servant accompanying the khan'

c. łora ɣud-e-r-si ħalt'i
three.OBL day-OS-LAT-ATTR work.ABS.III
'three days of work (three-day-long work)'

d. qido-qo-si saʕat[2]
wall-POSS.ESS-ATTR clock.ABS.III
'wall clock'

e. saʕat-yä-si saʕat
hour-IN.ESS-ATTR hour.ABS.III
'every hour' (lit.: hourly hour)

f. araq'i-qo-si sik
moonshine-POSS.ESS-ATTR skin.container.ABS.IV
'leather container for keeping moonshine'

g. q'ˤuna-ƛ'o-si tupi
two.OS-SUPER.ESS-ATTR rifle.ABS.IV
'double-barreled rifle'

h. ʕomoy-s-ce-si aħ-ya-bi
donkey-GEN1-EQUAT-ATTR ear-OS-PL.ABS.nIPL
'donkey ears'

i. ader-si
before-ATTR
'old, prior, former, ancient'

j. t'o-si
here-ATTR
'local'

k. nesi-r-si
DEM.I-LAT-ATTR
'petaining to him'

[2] The word *saʕat* means 'hour, clock, watch'; we gloss it according to the context.

As discussed in Ch. YY [Noun phrase], adjectives agree with the head noun in gender, have optional plural marking with the distributive suffix *–t'a*, and can be marked for definiteness of the head noun with the suffix *–ni.* Some adjectives also show case concord with the head noun (unless they are marked for definiteness); concordant adjectives distinguish between two forms, the direct form (modifying the head noun in the absolutive) and the oblique form (modifying all other noun forms).

2 Internal structure of an adjectival phrase

2.1 Complement-taking adjectives

Adjectives and derived attributives can take complements expressed by any type of noun phrase, in a variety of cases or postpositional forms. Adjectival phrases are strictly head-final, so the complement selected by the adjective/attributive always precedes the head. Some examples:

(4) ix-a-ƛ' raziyaw
spring-OS-SUPER.ESS happy, cheerful
happy about spring'

(5) t'et'ra-ni-x/t'etr-a ħadur-si
study-MASD-AD.ESS/study-INF ready-ATTR
'ready to study'

(6) uži Ø-ik'i-z-ā-ƛ q'^{w}arid
boy.ABS.I I-go-NMLZ-OS-SUPER.ESS sad
'sad because of/about the boy leaving'

(7) sasaq-azo-ł xizay-si
morning-OS-CONT.ESS following-ATTR
'following the morning'

(8) nesi-q b-ił-äsi
DEM.I.OS-POSS.ESS IPL-similar-RES.PTCP
'(those) resembling him (pl.)'

The complement of the adjective AGR-*iłe* 'similar' appears either in the equative form or in the absolutive form. In either form, AGR-*iłe* agrees with the head noun. For example:

(9) babiw-ce Ø-iłe/y-iłe uži/kid
father-EQUAT I-similar/II-similar boy.ABS.I/girl.ABS.II
'the/a son/daughter (almost) like Father'

(10) babiw Ø-iłe/y-iłe uži/kid
father.ABS I-similar/II-similar boy.ABS.I/girl.ABS.II
'the/a son/daughter like Father'

There is an interpretive difference between the two forms; the form with the equative implies a weaker similarity. Accordingly, this form is used in expressions of approximate quantity, for example:

(11) Nes-ä kaɣat łˤono-ce y-iłe saʕat-y-ä
DEM.I-ERG letter.ABS.II three-EQUAT II-similar hour-OS-IN.ESS
cax-si.
write-PST.WIT
'He wrote the letter in about three hours.'

Imnajšvili (1963: 216) also mentions deverbal adjectives ending in *–li,* which resemble participles in that they retain the arguments of the verb they derive from. For example, the verb AGR-ayr- 'bring' (causative of AGR-*ay*- 'come') takes the ergative agent and the absolutive patient. The derived adjective AGR-*ayrali* has the same arguments; thus:

(12) neł-ō b-ayra-li garpuz
DEM nI.ERG III-bring-ADJ watermelon.ABS.III
'the watermelon that she brought' (Imnajšvili 1963: 216)

Such complement-taking adjectives seem closer to participles; they are not widely used in current language.

2.2 Degree expressions modifying the adjective

Adjectives can be preceded by a degree expression, such as *bešun* 'extremely', *hič'č'a* 'very, most', *caq'* 'very, strongly, extremely', *ʕeziˤan* 'extremely', *ʕuraw* 'very; enough';[3] *ʕeziyaw* 'enough', *xec* 'enough', *ˤela* 'sufficiently'; *t'āki* 'slightly, a bit', *ence* 'somewhat'.[4] For example:

(13) ence tutunu šeƛ'u
somewhat dirty clothes.ABS.IV
'slightly dirty clothes'

Since adverbs and adjectives in Tsez are in most cases indistinguishable in form (see Ch. YY [Adverbs] and YY [Adverbial phrase]), most degree expressions can also be used adjectivally (with the exception of *(h)ič'č'a* and *bešun*). For example:

(14) a. ʕela bišʷa
sufficient food.ABS.III
'sufficient food'
b. t'āki ħalt'i
slight work.ABS.III
'light work'

If an adjectival phrase includes several words that can express degrees, only the leftmost one is interpreted as a degree denotation.

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[3] There is also an adjective *ʕuraw* 'numerous'.

[4] The degree denotations *hič'č'a* and *bešun* are also used to form superlatives: see section 4 below.

2.3 Agreement and concord in the adjectival phrase

The head of an adjectival or attributive phrase agrees in gender with the noun modified by it; see CH. YY[Agreement] for details. Adjectives that end in the attributive suffix *–si* (see section 1 above) distinguish two forms: direct in *–si* and oblique in *–z(o)*. The direct form appears with the head noun in the absolutive, and the oblique form modifies nouns in all other cases and forms. For example:

(15) a. č'urä-si otaxi-bi
bright-ATTR room-PL.ABS.nIPL
'bright rooms'

b. č'urä-zo otaxi-z-ä
bright-ATTR.OS room-PL.OS-IN.ESS
'in bright rooms'

(16) a. huday-ƛ'-äy-si(-ni) mužmar
next-SUPER-ABL-ATTR-DEF Friday.prayer.ABS.III
'(the) next Friday prayer'

b. huday-ƛ'-äy-zo-ni mužmar-ƛ'o
next-SUPER-ABL-ATTR.OS-DEF Friday.prayer-SUPER.ESS
'at the next Friday prayer'

Adjectives can also be marked for definiteness, with the suffix *–ni*, as in (16) above. For details of definiteness marking, which pertains to the structure of the noun phrase, see Ch. YY [Noun phrase]. See also that chapter for the relative order of multiple nominal modifiers.

3 Comparatives

In our discussion of comparatives, we will be using the following terminology to refer to the constituents of a comparative construction:

(17)

The African elephant	is tall	-er	than	the Asian elephant
TARGET OF COMPARISON	GRADABLE PREDICATE	COMPARATIVE MORPHEME	STANDARD MARKER	STANDARD OF COMPARISON

by about a meter.
AMOUNT PHRASE

Comparison can be used in expressions of similarity and difference, which we discuss in turn below.

3.1 Expression of similarity

The expression of similarity includes the phrase denoting the standard of comparison with the equative particle *–ce.* It is then followed by the gradable adjective denoting the property under consideration. The particle *–ce* combines only with nominal expressions, however complex (cf. the complex noun phrase in (22)). The following examples illustrate similarity phrases:

(18) ciyo-ce ča^{ʕ}ɣaw
salt-EQUAT bitter, salty
STANDARD PROPERTY
'bitter as salt'

(19) i-ce[5] aluk'a
snow-EQUAT white
'white as snow'

(20) t'om-ce Ø-^{ʕ}eɣe
handspan-EQUAT I-small
'being the size of a (man's) handspan'

(21) ader-zo-x-or-ce ħalimaw
before-ATTR.OS-AD-LAT-EQUAT polite
'polite as in old days'

(22) [ɣalat' ānu-si cäx-ru-(łi)]-ce bac'adaw
mistake PRS.NEG-ATTR write-PST.PTCP-NMLZ-EQUAT clean
'clean like a piece written without any mistakes'

In the following examples, adjectival phrases expressing similarity are shown as part of the main clausal predicate. Note that the nominalizing suffix *–łi* (as in (24)) can be omitted in casual speech:

(23) Heresi mec-re-s huni k'et'u-s k'onč'u-ce
deceitful language-OS-GEN1 road.ABS.IV cat-GEN1 leg-EQUAT
k'ot'ono r-iči-xosi.
short IV-stay-PRS.PTCP
'The road traveled by deceitful language is as short as a cat's leg.'
(proverb used in the meaning "Rumors travel fast.")

(24) Eni-y-ä ħak'o r-äy-ru-(łi-)ce r-igu
mother-OS-ERG xinkal.ABS.IV IV-do-PST.PTCP-NMLZ-EQUAT IV-good
zow-s esi-y-ä hek'u ešay-xosi-łi-n.
be.PST-PST.WIT sibling-OS-ERG potatoes.ABS.III fry-PRS.PTCP-NMLZ-TOP
'Sister was as good at frying potatoes as mother was at making dumplings.' (lit.: Sister frying potatoes was as good as mother making dumplings.)

Equatives in *–ce* can also serve to express approximate similarity. In this use, they often combine with the agreeing adjective AGR-*iłe* 'similar, like' (the corresponding adverb AGR-*iłe* is shown in CH. YY [Adverbial phrase]). For example:

(25) Uži babiw-ce Ø-iłe Ø-oq-äsi (yoł).
boy.ABS.I father-EQUAT I-similar I-become-RES be.PRS
'The boy is almost as tall as (his) father.'

[5] Truncation of *isi* 'snow'.

Participial phrases with *–ce* are used in comparative correlatives, for example (see also CH. YY[Relative clauses] for further discussion):

(26) [Už-ä inkar b-ädi-ru-ce ža y-ˢeže-gon…]
boy-ERG refusal.ABS.III III-do-PST.PTCP-EQUATDEM.ABS(.II) II-big-CONTR.TOP
ƛ’iri y-uti-n.
above II-turn-PST.nWIT
‘The more the boy refused, the more she insisted (lit.: … turned above).’ (ʕAliqilič:80)

3.2 Comparative expressions

Tsez does not have an overt comparative morpheme meaning ‘more’ or ‘less’. Comparatives of superiority are expressed by putting the standard of comparison in the super-ablative form, which precedes the gradable adjective. Consider the following example:

(27) Zarema-tow-ƛ’-äy bercinaw
Zarema-FOC-SUPER-ABL beautiful
‘more beautiful than even Zarema’

As long as the standard of comparison is expressed by a nominal form (a noun proper or a nominalized expression), the comparative construction is grammatical. In the examples below, we show adjectival phrases of comparison as they are used in clauses:

(28) ʕali irbahin-ƛ’-äy Ø-exora (yoł).
Ali.ABS Ibrahim-SUPER-ABL I-tall be.PRS
‘Ali is taller than Ibrahim.’

(29) ʕali-r irbahin-ƛ’-äy r-igu q’amat-ya-bi
Ali-LAT Irbahim-SUPER-ABL nIPL-good grade-OS.PL-PL.ABS.nIPL
r-iqi-x.
nIPL-be.gotten-PRS
‘Ali gets better grades than Ibrahim.’

(30) Dow-ƛ’-äy bercinaw-n dow-zo-ƛ’-äy bercinaw
2SG-SUPER-ABL beautiful-and 2SG-ATTR.OS-SUPER-ABL beautiful
haraƛ’ yoł-äsi-n dä-r dunyal-zo gug-yo-ƛ’
voice.ABS.III be.PRS-RES-and 1SG-LAT world-GEN2 dorsum-OS-SUPER.ESS
aɣi b-ukay-nč’u.
bird.ABS.III III-see-PST.NEG
‘I have not seen in this world (lit. over the back of the world) a bird more beautiful than you and a voice more beautiful than yours.’ (Ɣˢʷadin zirun:3)

(31) Yaq’ˢuł ħuł-zo-ƛ’-āy tatanu (yoł).
today yesterday-ATTR.OS-SUPER-ABL warm be-PRS
‘Today is warmer than yesterday.’

(32) Pat’i dey didur pikru
Fatima.ABS 1SG.GEN so thought.ABS.III
yäł-ru-zo-ƛ’-āy bercinaw (yoł).
be-PST.PTCP-ATTR.OS-SUPER-ABL beautiful be-PRS
‘Fatima is more beautiful than I thought.’ (lit.: … than my thought being so)

(33) Aprika-s pil indiya-zo-ƛ'äy
Africa-GEN1 elephant.ABS.III India-ATTR.OS-SUPER-ABL
ixiw b-iči-xo-si (yoł).
big III-stay-PRS-ATTR be.PRS
'The African elephant is larger than the Indian one.'

(34) Pat'imat-ä r-äs-ru heneš-yo-za-ƛ'-äy
Fatima-ERG nIPL-take-PST.PTCP apple-OS-OS.PL-SUPER-ABL
Zarem-ä geni dah b-is-no.
Zarema-ERG pear.ABS.III few/little III-take-PST.nWIT
'Fatima bought more apples than Zarema bought pears.' (lit.: Compared to the quantity of apples that Fatima bought, Zarema bought few pears)

(35) Yiła istowli-s rexor-łi ac-mo-z
DEM.nI.OBL table-GEN1 long-NMLZ.ABS.IV door-OS-GEN2
ħoliw-łi-ƛ'-äy r-aqˢu (yoł).
wide-NMLZ-SUPER-ABL IV-many be.PRS
'This table is longer than the door is wide.' (lit.: the length of this table is greater than the width of this door)

All these examples suggest that Tsez comparatives are phrasal in nature; the standard of comparison has to be a noun phrase, which is typical of phrasal but not clausal comparatives. This is further confirmed by the behavior of comparatives that refer to actions; the verbs encoding such actions can appear in the infinitive (or masdar) form, but never in any other form. An exception arises when the verb is explicitly substantivized, as *esayxo-zo-ƛ'-äy* is in the example below (the verb AGR-*et*- 'like' agrees with the infinitival clause *meš-kuro raˢƛa*, marked by brackets, in gender IV):

(36) a. Madina-r šeƛ'u esayxo-zo-ƛ'-äy
Madina-LAT clothes.ABS.IV wash-PRS-ATTR.OS-SUPER-ABL
[meš-kuro r-aˢƛ-a] r-eti-x.
broom-washtub.ABS.nIPL nIPL-apply-INF.ABS.IV IV-like-PRS
'Madina likes cleaning more than washing clothes.'
b. *Madina-r šeƛ'u esayxo-ƛ'-äy meš-kuro
Madina-LAT clothes.ABS.IV wash-PRS-SUPER-ABL broom-washtub.ABS.nIPL
r-aˢƛ-a r-eti-x.
nIPL-apply-INF.IV IV-like-PRS
c. *Madina-r šeƛ'u esayxo-zo-ƛ'-äy
Madina-LAT clothes.ABS.IV wash-PRS-ATTR.OS-SUPER-ABL
meš-kuro r-aˢƛi-x r-eti-x.
broom-washtub.ABS. nIPL nIPL -apply-IPFV.CVB IV-like-PRS

If the amount phrase is present in a comparative, it appears in the in-essive form, thus:

(37) Pat'i Zarema-ƛ'äy q'ˢuna ł'eb-ā
Fatima.ABS Zarema-SUPER-ABL two.OBL year-IN.ESS
y-ˢeže (yoł).
II-old be.PRS
'Fatima is two years older than Zarema.'

(38) Yaq'ˢuł łera garadus-y-ä ħuł-zo-ƛ'äy
today five.OBL degree-OS-IN.ESS yesterday-ATTR.OS-SUPER-ABL
tatanu (yoł).
warm be.PRS
'It's five degrees warmer today than yesterday.'

Tsez does not seem to have comparatives of inferiority. In expressing such a comparison, speakers generally use the negative form of equative expressions, for example:

(39) Ža uži ʕali-ce ʕadalaw ānu.
DEM boy.ABS.I Ali-EQUAT foolish be.PRS.NEG
'This boy is not as stupid as Ali.' (intended meaning: "This boy is less stupid than Ali")

4 Superlatives

The concept of the superlative is expressed in several ways, none of which is exclusive to the expression of superlativity.

Under one strategy, the superlative reading can be expressed by combining the relevant adjective with one of the following degree expressions: *bešun* 'extremely', *(h)ič'č'a* 'very, most', *caq'* 'very, strongly, extremely'.[6] As with comparatives, the standard of comparison appears in the super-ablative form:

(40) (Nāzon komanda-ƛ'-äy) Germaniya-za-s (komanda)
all.OBL team-SUPER-ABL Germany-OS.PL-GEN1 team.ABS.III
(h)ič'č'a b-igu yoł.
most III-good be.PRS
'(Of all the teams,) the German team is the best.'

(41) Nāzon c'alduqan-za-ƛ'äy ʕali hič'č'a
all.OBL student-OS.PL-SUPER-ABL Ali.ABS.I most
ˢaq'luyaw (yoł).
clever be.PRS
'Of all the students, Ali is the smartest.'

When the adjective with the superlative interpretation is used non-predicatively, it has to appear in the definite form:

(42) (H)ič'č'a Ø-igu*(-ni) už-ä berhentłi r-is-si.
most I-good-DEF boy-ERG victory.ABS.IV IV-take-PST.WIT
'The best boy won.'

[6] Bokarev (1959: 195) lists only the intensifier *caq'*; our consultants prefer *hič'č'a* and *bešun.*

The superlative form, as a regular form, can also be used with a null head, in which case the definite suffix is also obligatory:

(43) (H)ič'č'a Ø-igu-n-ä/* Ø-ig-ä berhentłi r-is-si.
most I-good-DEF-ERG/I-good-ERG victory.ABS.IV IV-take-PST.WIT
'The best one won.'

(44) Hič'č'a-n qˤaba hič'č'a-n kokoru hič'č'a-n ʕedeʕaraw
most-and black most-and soft most quick
šebin šebi (yoł)?
thing.ABS.IV what.ABS.IV be.PRS
'What is the blackest, the softest, and the quickest thing (in the world)?'
(ʕAq'ilawni kid:5)

Another strategy consists of using a reduplicated adjective to mark the superlative; the superlative reading of these adjectives is reinforced when they co-occur with the standard of comparison in the super-ablative. Compare:

(45) *pro* nāzon-ƛ'-äy r-ig-r-igu rok'ura-bi
all.OBL-SUPER-ESS nIPL-good.RED earring-PL.ABS.nIPL
r-ok'ek'-si
nIPL-steal-PST.WIT
'They stole the best earrings of all.'

Such reduplication is often accompanied by the focus enclitic *–tow,* which can appear on the first reduplicate, the second, or both:

(46) a. kʷaxa-kʷaxa-tow berten
soon.RED-FOC wedding.ABS.III
b. kʷaxa-tow-kʷaxa berten
soon-FOC-soon wedding.ABS.III
c. kʷaxa-tow kʷaxa-tow berten
soon-FOC soon- FOC wedding.ABS.III
'the soonest wedding; a wedding to be held as soon as possible'

Reduplication with focusing is also used with the numeral *sis* to express the meaning 'the only', e.g.,

(47) sis-tow sis (yäł-ru-ni) esiw
one-FOC one be.PRS-PST.PTCP-DEF sibling.ABS.I/II
'the only sister/brother'

Reduplication is not exclusive to the expression of the superlative; reduplicated adjectives can have a more general meaning of intensification, cf. (48):

(48) Di r-ig-r-igu rok'ura-bi r-is-si.
1SG.ERG nIPL-good.RED earring-PL.ABS.nIPL nIPL-take-PST.WIT
'I bought really nice earrings.'

As (49) shows, reduplication is possible with non-gradable adjectives as well, in which case it serves to express emphasis or surprise.

(49) a. Nesi-q-or meq'aw micxir b-ay-n.
DEM.I-POSS-LAT false money.ABS.III III-come-PST.nWIT
'He got counterfeit money.'

b. Nesi-q-or meq'-meq'aw micxir b-ay-n.
DEM.I-POSS-LAT false.RED money.ABS.III III-come-PST.nWIT
'He got COUNTERFEIT money.'

In a strategy reminiscent of reduplication, two instances of the same adjective, with the first iteration in the sub-ablative form, also denote a superior quality:

(50) a. r-igu-ƛ-āy r-igu biš^{w}a
iv-good-SUB-ABL IV-good food.ABS.IV
'the best food' (Qacis gulu:50)

b. mo^{ʕ}ł-xo-z-a-ƛ-āy mo^{ʕ}ł-xo-si žek'u
teach-PRS-ATTR.OS-OS-SUB-ABL teach-PRS-ATTR person.ABS.I
'the most learned man'

Adverbial phrases and postpositional phrases

1 General remarks

Adverbial phrases can be expressed by an adverb proper,[1] by a postpositional phrase or noun phrase in one of the oblique case forms, or by a converb, possibly with accompanying complements. Example (1) shows adverbial phrases with an adverb as head, example (2) presents NP- and PP-based adverbial phrases, and example (3) illustrates the converbal strategy:

(1) a. Xexbi žigon guruƛi-s.
child.ABS again cry-PST.WIT
'The child cried again.'

b. Taliħq'ayaw mi dä-r y-ukay-nč'i.
unfortunately 2SG.ABS.II 1SG-LAT II-see-NEG
'Unfortunately I won't see you (speaking to a woman).'

c. El-ä hudun łiyr-ān yedu ħalt'i.
1PL-ERG probably finish-FUT.DEF DEM.nI work.ABS.III
'We will probably finish this work.'

d. Keč'oƛ'āz y-ači.
left II-stay.IMPER
'Sit on the left (speaking to a woman).'

(2) a. Debe-z pikru-xo-r nāzon debe-r-ä
2SG-GEN2 thought-AD-LAT all.ERG 2SG-LAT-INTERR
kumak b-od-a b-ay-x?
help.ABS.III III-do-INF III-must-PRS
'In your opinion, does everyone have to help you?'

b. Nes-ä (sidä) saʕat-y-ā-r b-oy-s
DEM.I-ERG one.OBL hour-OS-IN-LAT III-do-PST.WIT
ža ħalt'i.
DEM work.ABS.III
'He completed this work in an hour.'

c. Nes-ä (sidä) saʕat-y-ā Ø-eynoy-s.
DEM.I-ERG one.OBL hour-OS-IN.ESS III-work-PST.WIT
'He worked for an hour.'

d. Učitel-bi otpusk-a-ł at'ono-q b-ik'i-x.
teacher-ABS.PL.IPL leave-OS-CONT.ESS summer-POSS.ESS IPL-go-PRS
'Teachers go on leave in the summer.'

[1] A number of words that we identify as adverbs proper can be diachronically related to oblique nominal forms as well; for example, *taliħq'ayaw* in (1b) is can be traced back to the historically decomposable form *taliħ-q'ay-aw* 'luck-CARITIVE-ATTR', and *keč'oƛ'āz* in (1d) goes back to *keč'-o-ƛ'-āz* 'left-OS-SUPER.ESS-DISTAL'.

(3) a. Meši-bi [nā-gon r-oq-łin]
calf-PL.ABS.nIPL where-CONTR.TOP nIPL-become-CONC.CVB
r-ičі-n.
nIPL-stay-PST.nWIT
'The calves stayed wherever they liked.'

b. ʕal-ä [haraƛ b-oy-n] k'ač qˤaƛi-x.
Ali-ERG loud III-do-PFV.CVB song.ABS.III shout-PRS
'Ali sings loudly.'

c. [Irbahin xeci-n] nāzon yedu t'ek t'et'er-si.
Ibrahim.ABS.I leave-PFV.CVB all.ERG DEM book.ABS.II read-PST.WIT
'Everybody except Ibrahim read the book.'

Since clauses headed by a converb constitute a large portion of Tsez adjunct clauses, they can all be considered adverbial phrases as well. Nevertheless, we defer our discussion of converbal clauses to Ch. YY [Adverbial clauses] and will concentrate in this chapter on adverbial phrases consisting of adverbs proper and of nominals in various oblique forms.

2 Agreement and expression of plurality in adverbs

2.1 Agreement

Some adverbs have an agreement slot and agree with the absolutive argument; in (4), the adverb AGR-*uygon* agrees with the absolutive in gender II, and in (5), the adverb AGR-*aƛo* agrees with the absolutive in gender III. If an adverbial phrase includes an agreeing degree modifier, that modifier also shows agreement, as demonstrated by (5) where AGR-*aˤq'u* also has gender III agreement:

(4) Nes-ä kaɣat y-uygon y-egir-si.
DEM.I-ERG letter.ABS.II II-already II-send-PST.WIT
'He already sent the letter.'

(5) Že gulu b-aˤq'u b-aƛo b-ik'i-x.
DEM horse III-much/many III-fast III-go-PRS
'This horse runs very fast.'

The main agreeing adverbs are as follows:

(6) a. AGR-aq'ˤu 'much, many'
b. AGR-aq'ˤut'a 'loud'
c. AGR-ˤaƛo 'fast'
d. AGR-ig 'well'
e. AGR-ig-žuk 'so so' (lit.: well badly)
f. AGE-iłe 'similarly; as X'
g. AGR-uy 'truly'[2]
h. AGR-uygon 'already'

[2] The adverbs containing *uy* can all be traced to the same lexical item in (6g), but their synchronic meanings are quite different, so we list them separately.

i. AGR-uyxor ‘quietly’
j. AGR-uytow ‘for free, free of charge’

Some adverbs, related to verbs that have an agreement slot, nevertheless have a frozen agreement marker and do not change depending on the gender of the absolutive argument. For example, *retintow* ‘deliberately, on purpose’ (diachronically related to AGR-*et*- ‘like, want’) or *riyinč’ey* ‘by accident’ (diachronically related to AGR-*iy*- ‘know’) have the frozen gender marker *r*-. In), the verb agrees with the absolutive in gender III but the adverb appears in the frozen form; in (7), the object is in gender I but the adverb appears with the frozen prefix *r*-. The adverbial use of *riyinč’ey* is different from the use of the perfective converb of AGR-*iy*- ‘know’, in the negative form (AGR-*iyinč’ey* ‘unknown, unnoticed’), which agrees with the absolutive argument (see CH. YY[Adverbial clauses]).

(7) Neł-ä retintow murad goƛ’-inč’u.
DEM.nI-ERG on.purpose Murat.ABS.I call-PST.nWIT.NEG
‘She purposely did not invite Murat.’

(8) Kid-b-ä riyinč’ey ɣ^{w}ˀay b-egir-si.
girl-OS-ERG accidentally dog.ABS.III III-send-PST.WIT
‘The girl accidentally let the dog out.’

If an adverbial phrase is expressed by a converbal phrase, then agreement is determined by the argument structure of the converb. For example, in (3a), repeated below, the converb form is intransitive, has an overt agreement slot, and agrees with the unexpressed subject coreferential with ‘the calves’:

(9) Meši-bi$_i$ [*pro*$_i$ nā-gon r-oq-łin]
calf-PL.ABS.nIPL where-CONTR.TOP nIPL-become-CONC.CVB
r-ičі-n.
nIPL-stay-PST.nWIT
‘The calves stayed wherever they liked.’ (=(3a))

In (3b), the converb form is transitive, also has an agreement slot, and agrees with the absolutive object ‘song’, as shown in (10a). The object can also be expressed inside the converbal phrase as in (10b); it still determines agreement on the converb.

(10) a. ˀal-ä [*pro*$_i$ haraƛ b-oy-n] k’eč$_i$ qˀaƛi-x.
Ali-ERG loud III-do-PFV.CVB song.ABS.III sing-PRS
b. ˀal-ä [k’eč$_i$ haraƛ b-oy-n] *pro*$_i$ qˀaƛi-x.
Ali-ERG song.ABS.III loud III-do-PFV.CVB sing-PRS
‘Ali sings loudly.’ (=(3b))

Adverbs can combine with the distributive suffix *–t’a* (see Ch. YY [Noun phrase] and YY [Adjective phrase]); this strategy is particularly common with the adverb *ence* ‘a little; somewhat’. The distributive suffix provides the additional meaning of intensification, as in (11b), and/or the notion of an event in progress, as in (12b), which emphasizes the process of listening.

(11) a. Ence Ø-iš.
a.little I-eat.INTR.IMPER
'Eat a little!/Eat small amounts.' (addressing a male)

b. Ence-t'a Ø-iš.
a.little-DISTR I-eat.INTR.IMPER
'Eat slowly!' (addressing a male)

(12) a. R-ig ʕenekizi r-oq xabar-ya-qo-r.
nIPL-well listen nIPL-become.IMPER story-OS-POSS-LAT
'Listen carefully to the story.' (addressing a group of people)

b. R-ig-t'a ʕenekizi r-oq xabar-ya-qo-r.
nIPL-well-DISTR listen nIPL-become.IMPER story-OS-POSS-LAT
'Pay close attention to the story.' (addressing a group of people)

3 Internal structure of an adverbial phrase

Adverbs proper can be modified by a number of degree expressions, such as *bešun* 'extremely', *hič'č'a* 'very, most', *caq'* 'very, strongly, extremely', *ˁeziˁan* 'extremely'; *ˁeziyaw* 'enough', *xec* 'enough', *ˁela* 'sufficiently'; *t'āki* 'slightly, a bit', *ence* 'a little; somewhat'. The degree expression always precedes the adverb. For example:

(13) hič'č'a kwaxatow
very/most soon
'very soon; the soonest'

(14) c'aq' harihun
very slowly
'very slow'

(15) c'aq'tow nagaħ
completely suddenly
'completely unexpectedly'

(16) AGR-aˁq'u AGR-aƛo
much/many fast
'very fast' (see (5) above)

(17) ence(-tow) xexłiƛ'
somewhat-FOC fast
'a bit too fast'

Of the degree expressions presented here, *t'āki* and *ence(-tow)* can also appear as independent adverbials. For example:

(18) Ža ence(-tow) liɣˁonił-xo.
DEM.ABS.(I/II) somewhat-FOC limp-PRS
'S/he limps a bit.'

There are no degree adverbials with the meaning 'almost' or 'approximately'. To convey such a meaning, Tsez uses comparatives of similarity, which we discuss in the next section.

4 Degrees of comparison in adverbial phrases

Comparison in gradable adverbs is expressed the same way as comparison in adjectives (see Ch. YY [Adjectival phrase]). The comparison of similarity is expressed by an adverbial phrase with the equative *–ce,* optionally followed by AGR-*iłe* 'similar(ly)'. For example:

(19) Nes-ä harihun-ce (b-iłe) ħalt'i b-oy-n.
DEM.I-ERG slowly-EQUAT III-similarly work III-do-PST.nWIT
'He did the work almost slowly.'

Recall that Tsez does not have an overt comparative morpheme meaning 'more' or 'less'. Comparatives of superiority are expressed by putting the standard of comparison in the super-ablative form, which precedes the gradable adverb. For example:

(20) ʕali irbahin-ƛ'-āy Ø-ˁaƛo xibaƛ' k'oƛi-x.
Ali.ABS Ibrahim-SUPER-ABL I-fast running run-PRS
'Ali runs faster than Ibrahim.'

(21) Pat'imat-ä Zaira-ƛ'-āy [haraƛ b-oy-n] k'eč' qˁaƛi-x.
Fatima-ERG Zaira-SUPER-ABL loud III-do-GER song.ABS.III sing-PRS
'Fatima sings louder than Zaira.'

(22) Nes-ä yiƛa sual-yo-r neła-ƛ'-āy xizaɣor
DEM.I-ERG DEM.nI question-OS-LAT DEM.nI-SUPER-ABL later
žawab neƛ-si.
answer.ABS.III give-PST.WIT
'He answered that question after her (later than her).'

In the following example, the adverbial phrase is assessed against the standard of comparison expressed by a noun modified by a relative clause (lit.: 'the whistle that Ibrahim hit'):

(23) ʕal-ä k'eč haraƛ b-oy-n qˁaƛi-x
Ali-ERG song.ABS.III loud III-do-GER sing-PRS
irbahin-ā y-āk'-ru šaru-ƛ'-āy.
Ibrahim-ERG II-hit-PST.PRTCP whistle-SUPER-ABL
'Ali sings louder than Ibrahim whistles.' (lit. Ali sings louder than Ibrahim's whistling)

The superlative meaning in adverbs can be encoded by the degree expressions *bešun* 'extremely' or *hič'č'a* 'very, most', which precede the gradable adverb (24), by (partial) reduplication (25),[3] or by the addition of the focus particle to the head of the adverbial phrase (26). Reduplication is not available to adverbial converbal phrases.

(24) a. ʕal-ä k'eč hič'č'a haraƛ b-oy-n qˁaƛi-x
Ali-ERG song.ABS.III most loud III-do-GER sing-PRS

[3] For reduplication of adverbs and adjectives, see Ch. YY.

nāzon-ƛ'-äy.
all-SUPER-ABL
'Ali sings the loudest.'

b. Dey samalyot bešun waħħo b-iči-x.
1SG.GEN1 plane.ABS.III extremely low III-stay-PRS
'Your (toy) plane is flying the lowest.'

(25) a. Dey samalyot waħ-waħħo b-iči-x.
1SG.GEN1 plane.ABS.III low.RED III-stay-PRS
'Your (toy) plane is flying the lowest/very low.'

b. Mi ad-adäz Ø-ik'i-s.
2SG.ABS in front.RED I-go-PST.WIT
'You went ahead of everyone.'

(26) a. Ader-tow idu zow-s yedu kid.
before-FOC home be.PST-PST.WIT DEM girl.ABS.II
'That girl was home the earliest.'

b. Nes-ä žuk-tow c'ax-si.
DEM-ERG badly-FOC write-PST.WIT
'He wrote (smth) the worst of all.'

None of the three strategies described here is exclusive to the expression of the superlative. For instance, reduplicated adverbs can simply have the meaning of intensification, as shown in (27) for a gradable adverb and in (28) for a non-gradable one (see Ch. YY [Adjectival phrase] for the same generalizations with respect to adjectives).

(27) Nes-ä yedu ħalt'i t'assa=massa b-oy-s.
DEM.I-ERG DEM work.ABS.III superficially.RED III-do-PST.WIT
'He did this work very poorly.'

(28) Xexbi žig-žigon guruƛi-x.
child.ABS again.RED cry-PRS
'The child is crying yet again.'

5 Adverbial phrases by subtype

The following subsections present main types of adverbial phrases based on their meaning. We include indeterminate and negative adverbs within each section, although some general patterns emerge. In particular, adverbs expressing indefiniteness can be derived from the base adverb with the addition of the particles *–ƛa* and *–go(n)*, which derive existential and free choice expressions respectively.[4] Other types of adverbs can be derived via suffixation: adverbs expressing the additional meaning of intensification can be derived with the distributive suffix *–t'a*; universally quantified adverbs are formed with the suffix *tow/–tew*; and negative-polarity adverbs are derived with the suffix *–kin* (we gloss both *–tow* and *-kin* as focus particles).

[4] For the difference between the two particles, see CH. YY[Particles].

5.1 Adverbial phrases of manner

Adverbial phrases of manner include AGR-*ig* 'well' (cf. the adjective AGR-*igu* 'good'), *žuk* 'badly' (cf. the adjective *žuka* 'bad'), AGR-*ig-žuk* 'somehow (usu. with negative connotations)',[5] AGR-ˢ*aƛo* 'quickly', AGR-*iłe* 'similarly; as', *harihun* 'slowly', *t'uban* 'completely' (an Avar borrowing), *c'ik'iw* 'completely, in full', *ħalica* 'with difficulty', *nadaħ* 'suddenly; unexpectedly',[6] etc. Some examples:

(29) Mašina harihun ħon-ƛ'o-ɣor b-izi-s.
car.ABS.III slowly mountain-SUPER-VERS III-rise-PST.WIT
'The car went slowly up the hill.'

(30) Nes-ä č'obogo ɣˢutku r-oy-s.
DEM.I-ERG in.vain house.ABS.IV IV-do-PST.WIT
'He built a house for nothing.'

The use of the super-essive form of nouns offers a productive pattern for deriving manner adverbials, especially from nouns denoting motion or sound emission. For example:

(31) a. dur(i)-mo-ƛ'
chase/running-OS-SUPER.ESS
'hastily; in running'

b. łoč-a-ƛ'
dance-OS-SUPER.ESS
'(in) dancing'

c. guru-ƛ'
cry/weeping-SUPER.ESS
'(in/by) crying'

d. qaƛ-no-ƛ'
scream-NMLZ-SUPER.ESS
'(in/by) screaming'

Some such adverbials seem completely lexicalized, and their connection to the corresponding nouns is no longer synchronically perceived; for example, (31a, b) are perceived as indivisible adverbs and are listed as such in Xalilov's dictionary (Xalilov 1999). The pattern illustrated in (31d) deserves special mention; here, the adverbial is derived from a nominalized form of the verb *qal-/qˢal-* 'scream'. Such nominalized forms of intransitive verbs are very common (see CH. YY[Nominalizations]) and they, in turn, provide material for the corresponding adverbials. Such adverbials often combine with verbs of motion or (dis)appearance to express the manner in which the event develops. For example:

(32) Id-āz-ay durmoƛ' b-oƛi-s k'et'u.
house-DIST-IN.ABL in.running III-appear-PST.WIT cat.ABS.III
'The cat rushed out of the house.'

[5] These adverbs are formed from the corresponding adjectives via truncation.

[6] *Nadaħ* is also used as the opening adverb in conditional clauses, see CH. YY[Converbal clauses].

We also find a similar use of converbal clauses as manner-encoding satellites with verbs of motion; see CH. YY[Adverbial clauses] for details.

Moving on to other uses of manner adverbs, in (33a), we find the manner adverbial encoded by a spatial form of the equative phrase 'as at home', with the second component agreeing with the absolutive; in (33b), the same adverbials are used without spatial marking:

(33) a. Yedu kid [idu y-ił-ā]/
DEM girl.ABS.II home.ADV II-similar-IN.ESS/
[ɣˢutk-ā y-ił-ā] y-ičі-x.
home-IN.ESS II-similar-IN.ESS II-stay-PRS
b. Yedu kid [idu y-iłe]/
DEM girl.ABS.II home.ADV II-similar /
[ɣˢutk-ā y-iłe] y-ičі-x.
home-IN.ESS II-similar II-stay-PRS
'This girl behaves as if she were at home.'

Indefinite manner adverbials include *didurƛa*, AGR-*ig-žuk*, and *didurgon.* The former two adverbials both express the meaning 'somehow', with an adverse or negative connotation:

(34) Ža dä-ł-xor didurƛa yoł.
DEM.ABS 1SG-CONT-VERS somehow be.PRS
'His attitude toward me is not great.' (lit.: he to me somehow is)

The manner adverbials *didurnokin* and *siskin* (derived from the word *sis* 'one', with the focus marker *–kin*) are negative polarity items and cannot appear without negation:

(35) Nes-ä darsi siskin/didurnokin b-oy-inč'u.
DEM.I-ERG lesson.ABS.III anyhow/anyhow III-do-PST.nWIT.NEG
'He did not prepare the lesson at all/in any way.'

The semantics of 'too', 'also' is expressed by adding the marker *–n* 'and' to the relevant constituent (see Ch. YY [Noun phrase] and CH.YY [Particles] on the use of *–n* in coordination). The particle *–n* does not combine with finite verbs; otherwise it can co-occur with any constituent. Consider some examples:

(36) Eƛ'i di-n zow-s maskuwa-ł.
last.year 1SG.ABS-and be.PST-PST.WIT Moscow-CONT.ESS
'I also visited Moscow last year.'
(37) Eƛ'i maskuwa-ł-no zow-s di.
last.year Moscow-CONT.ESS-and be.PST-PST.WIT 1SG.ABS
'Last year I was in Moscow as well.'

There are two markers *–n(o)* in Tsez; in addition to the linking *–n(o)*, we find a topic-marking particle (see Ch. YY [Particles]), so a question arises as to whether these functions can be

distinguished. Taken out of context, the two examples above can also mean ‘As for me, I was in Moscow last year’ and ‘In Moscow, I was (there) last year’; thus, they are ambiguous. However when *–n* is used in the meaning of ‘also, too’, the constituent that it attaches to can appear anywhere in the preverbal domain, but never postverbally. So, while (37) is ambiguous between the topic interpretation of ‘in Moscow’ and the interpretation ‘in Moscow as well’, the example below can have only one interpretation:

(38) Eƛ’i di zow-s maskuwa-ł-no.
past 1SG.ABS be.PST-PST.WIT Moscow-CONT.ESS-TOP
‘In Moscow, I was there last year.’
NOT: ‘Last year I was in Moscow as well.’

Manner adverbials can also appear as depictives, usually associated with the highest argument; for example:

(39) Nes-ä sual-yo-r xizaz/adāz žawab neƛ-si.
DEM.I-ERG question-OS-LAT lastly/before answer.ABS.III give-PST.WIT
‘He$_i$ answered that question$_k$ last$_{i/*k}$/first$_{i/*k}$.’
(= he was the first/last to answer that question;
NOT: that question was the first he answered)

(40) Eniw-r kid adāz y-ukay-s.
mother- LAT girl.ABS.II before II-see-PST.WIT
‘Mother$_i$ saw the girl$_k$ first$_{i/*k}$.’
(=Mother was the first to see the girl;
NOT: the girl was the first person that Mother saw)

Manner adverbials do not have a dedicated position in the clause. They can appear immediately preceding the verb, as in (35), (39), (40), between the subject and objects, as in (30), or sentence-initially, as below:

(41) Hemedur-tow ža xabar nesi-z b-ˢeže-t’a-ni
so-FOC DEM news.ABS.III DEM.I-GEN2 IPL-big-DISTR-DEF
es-na-za-ƛ’o-r-no b-ay-n.
sibling-PL-OS.PL-SUPER-LAT-and III-come-PST.nWIT
‘In such a way, the news also reached his older brothers.’
(Λelä bečed adiru miskin žek’u:24)

If the adverbial phrase is expressed by a converb, with or without complements, its preferred position is to the left of other objects and sometimes even before the subject; this is a reflection of the more general preference for placing longer constituents before shorter ones in the

preverbal domain.[7] Compare the following example, which includes a converbal phrase expressing manner and a light adverb of manner (which is closer to the verb):

(42) Nes-ä [sida baši-q *pro*$_i$ r-ixi-n]
DEM.I-ERG one.OBL finger-POSS.ESS IV-hang-PFV.CVB
aždaħ-e-s q’ˁim$_i$ [xexłiƛ’] r-ayr-no.
dragon-OS-GEN1 head.ABS.IV quickly IV-bring-PST.nWIT
‘With one finger, he quickly brought the dragon’s head.’ (based on ˁAliqilič: 102)

In addition to adverbial phrases expressed by adverbs or noun phrases in spatial forms, a number of converbal clauses can express manner adverbs; these are discussed in CH.YY[Adverbial clauses].

5.2 Adverbial phrases denoting location

Many adverbial phrases expressing location are formed on the basis of demonstratives (see Ch. YY and YY) or place names. The essive form denotes location *in/on/at* a place, the ablative form denotes location *away from* some place, and the lative and versative forms denote location *in the direction of* a given place. The group of adverbs expressing the general meaning ‘everywhere’ is particularly numerous; a number of these adverbs include reduplicated forms, as well as compounds expressing locations viewed as opposites (up and down, left and right). In the examples below, we show the morphological make-up of these adverbs, but it is important to keep in mind that they are probably viewed as unitary expressions:

(43) a. ciq=beqaq (< ci-qo-beq-a-q)
everywhere forest-POSS.ESS-southern.slope-OS-POSS.ESS
b. c’ik’iwyuzax (< c’ik’iw-yu-za-x)
everywhere complete-ATTR-OS-AD.ESS
c. bit=nitor (< bitor-bitor)
everywhere around-around
d. ƛ’iri=wˁał (ƛ’iri-wˁał)
everywhere up-below
e. ilo=int’o (ilo-int’o)
everywhere here-there
f. keč’oƛ’ār=kut’yoƛ’ār (keč’o-ƛ’-ār-kut’yo-ƛ’-ār)[8]
everywhere left-SUPER-VERS-right-SUPER-VERS

Indefinite locative adverbs are formed from the indeterminate *nā* ‘where’ in the in-essive, in-lative/in-versative and in-ablative forms. The indefinite form ‘somewhere; wherever’ (in a location) can also be expressed converbally by *nāgon* AGR-*oqƛin* (see (3a) above).

[7] The ordering generalizations outlined in this section pertain specifically to manner adverbs and not to adverbial phrases in general. We discuss word order generalizations for other kinds of adverbs in the relevant sections.

[8] The suffix *-ār* is a contraction of the versative suffix *-āɣor*.

(44) a. nāƛa
'somewhere' (in a location)
b. nārƛa/nāɣorƛa
'somewhere' (toward a location)
c. nāyƛa/nazayƛa
'from somewhere'
d. nāntow
'everywhere'

As with manner adverbials, the addition of *–kin* to the indeterminate adverb results in a negative polarity item:

(45) Mi nāsinan zow-s amma di-gon
2SG.ABS everywhere be.PST-PST.WIT but 1SG.ABS-CONTR.TOP
nāsikin zow-nč'u.
anywhere.NPI be.PST-PST.NEG
'You have been everywhere but I have not been anywhere.'

In a great number of instances, location adverbials are expressed by noun phrases in spatial cases as well as by frozen nominal forms. For example, the adverbial 'at home' is *idu,* and directional adverbs 'away from home' and 'home' are formed with the addition of the ablative and lative/versative affixes accordingly. Common spatial forms used to express location adverbials are cont-essive (cf. *maskuwa-ł* 'in Moscow' in (36)-(38) above) and in-essive, for location, cont-ablative/in-ablative for direction away, and cont-lative/versative, in-lative/versative for direction toward.

A common way of denoting locations is by using spatial forms of the past participle. It is possible for the participle to appear with the head noun *meči/ moči* 'place; field', in which case the head noun takes all the spatial marking. More commonly, though, the participle (with or without dependents) appears without a head noun, as a headless relative clause (see CH. YY[Relative clauses]). Compare the following minimal pair. In (46a), the participle modifies the head noun *meči*, which appears in the super-lative form. In (46b), there is no head noun, and the substantivized participle takes the spatial marking and functions as a locative expression.

(46) a. Ža [yizi xan yäł-ru] mečo-ƛ'o-r
DEM.ABS(.I) DEM.I king.ABS.I be.PRS-PST.PTCP place-SUPER-LAT
Ø-ik'i-n.
I-go-PST.nWIT
'He went up to the place where the king lived/was.'
b. Ža yizi xan yäł-(ru-)-zo-ƛ'o-r
DEM.ABS(.I) DEM.I king.ABS.I be.PRS-PST.PTCP-ATTR.OBL-SUPER-LAT
Ø-ik'i-n.
I-go-PST.nWIt
'He went up to the place where the king lived/was.'

In its oblique form with the attributive suffix *–zo*, the past participle combines with a variety of spatial endings, such as the in-essive (in the sense of "most general location") as well as the ablative, lative, or versative forms of the IN, CONT, or POSS series. In naturally occurring texts, the participial suffix *–ru* is omitted, but as shown below, it can be present:

(47) [Č'anya k'aλi-(ru-)z-ā] cek'i-n k'āλi.
goat.ABS.III jump-PST.PTCP-ATTR.OBL-IN.ESS kid.ABS.III-and jump.FUT
'Where there's smoke, there's fire.' (lit.: the kid will jump where the goat jumps)

(48) [Oz-e-r r-ukäy-nč'i-z-ä] r-uqˢeł.
eye-OS-LAT nIPL-see-PST.PTCP.NEG-ATTR.OBL-IN.ESS nIPL-hide.IMPER
'Hide where his eyes won't see you.' (addressing animals) (K'et'un zirun:23)

(49) [Debe-r r-äti-(ru-)z-ä] Ø-ik'i.
2SG-LAT IV-want-PST.PTCP-ATTR.OBL-IN.ESS I-go.IMPER
'Go where you wish.' (speaking to a man)

(50) [Mi xäci-(ru-)z-äy] Ø-ay-ä?[9]
2SG.ABS(.I) leave-PST.PTCP-ATTR.OBL-IN.ABL I-come-PST.WIT.INTERR
'Did you come from where (they) left you?'

(51) Žedu netin-tow beł-ƛ'
DEM.ABS.IPLL always-FOC hunting-SUPER.ESS
[buq b-ätu-(ru-)z-ā-ɣor]-t'a b-ik'i-x
sun.ABS.III III-be.lost-PST.PTCP-ATTR.OBL-IN-VERS-DISTR IPL-go-IPFV.CVB
zow-n.[10]
be.PST-PST.nWIT
'They always went to hunt in the direction where the sun sets.' (Łˢono esiw:9)

Forker (2013: 252-254) reports the same use of Hinuq participial constructions in the expression of location.

Adverbial phrases denoting location have two typical positions inside a clause: at the left edge, where they are interpreted as scene-setting expressions, providing the general coordinates of an event, and in the middle field of the clause, usually after the subject and other arguments. If the subject is indefinite, as in presentational clauses, it follows any adverbials; if definite, it precedes them. Compare (52), which introduces a measure of silver as a new referent, and (53), where 'silver ring' is definite:

(52) Elo teł ukru-s saħ eqr-äsi yoł.
there inside silver-GEN1 measure.ABS.III put-RES be.PRS

[9] This example may be structurally ambiguous; the second person absolutive *mi* may be interpreted with the converb, as we show in brackets, but it may also be part of the matrix clause.

[10] This example illustrates the set expression *buq bätuzā* 'in the west; at the sundown', which appears in the versative form but can also appear in the essive, ablative or lative. The opposite expression, *buq boƛexzā* 'in the east (lit.: where the sun rises)' is also widely used and can appear in different spatial forms.

'Inside there, there is a measure of silver.' (ˢAliqilič: 10)

(53) Dey ukru-s bˢašiqoy elo teł eqr-äsi yoł.
1SG.GEN1 silver-GEN1 ring.ABS.III there inside put-RES be.PRS
'My silver ring is inside there.'

5.3 Adverbial phrases of time

As adverbials of place, many temporal adverbials are expressed by nouns in spatial forms. For example, *žaˢquł* 'today', *yaˢquł* 'today', *ħuł* 'yesterday' are frozen forms with the cont-essive suffix *–ł*; the word *ħułzaƛ'* '(on) the day before yesterday' can be diachronically traced to the nominalization of *ħuł* (*ħułz-*) appearing in the super-essive form. The word *ɣude* 'tomorrow' is probably a frozen in-essive of *ɣudi* 'day'. The adverbial *ɣudes* literally means 'daily' but it is often interpreted as 'always'.

The stems *buqboƛ-* 'at dawn, in the morning' and *buqbeta-* 'at dinner-time' are frozen forms of the noun *buq* 'sun' that combine with the agreeing verbs AGR-*oƛ-* 'rise' and AGR-*et-* 'be lost'.[11] These stems further combine with spatial markers to form time adverbials, for example:

(54) a. buqboƛ-ay
sunrise-abl
'since morning'
b. buqbeta-x
sundown-ad.ess
'in the evening, at dinner time'

Example (54a) and the examples below show that temporal adverbs can carry lative and ablative affixes. We have already observed this pattern in adverbs of location.

(55) a. žaˢquł-āy/yaˢquł-āy
today-ABL/today-ABL
'since now; from now on'
b. sasaq-o-r
morning-OS-LAT
'by tomorrow, by the morning'

A number of adverbial phrases are expressed by complex nominals in a spatial form. For example:

(56) [ɣud-e-s ɣud-e-r] ɣud-bi r-eɣu-ł-xo.
day-OS-GEN1 day-OS-LAT day-ABS.PL.nIPL nIPL-short-INTR-PRS
'Days are getting shorter day by day.'

[11] In section 5.2, we showed how these forms produce converbal phrases of location; in such phrases, the noun *buq* is separate from the verb and the verb stem can undergo change. In the temporal phrases, however, *buq* cannot be separated from the verb and the verb stem does not change.

(57) [Huday ƛˤeb-ā] b-ay-ān.
next year-IN.ESS IPL-come-FUT
'We will come next year.'

There is no set adverbial phrase meaning 'once upon a time'; a typical opening line of a fairy tale, where such a phrase is to be expected, consists of a combination of the affirmative and negative forms of the verb 'be' followed by the name of the referent being introduced:[12]

(58) Zow-n-ƛax zow-n-ānu-ƛax onoču-n
be.PST-PST.nWIT-QUOT be. PST-PST.nWIT-NEG-QUOT hen.ABS.III-and
mamalay-n.
rooster.ABS.III-and
'Once upon a time there lived a chicken and a rooster.' (Onočun mamalayn:1)

Adverbial expressions of time occur at the left edge of the sentence if they serve as scene-setting expressions, situating the entire state of affairs in time; compare examples (36)-(38), (56), (57).

5.4 Adverbial phrases of frequency and order

The main non-derived adverbs in this subclass are:

(59) a. žigon 'again'
b. žigoƛ'āy 'once again'
c. žäd 'yet' (typically used with negation)
d. AGR-uygon 'already'
e. ži 'already'
f. netintow/netin/netinon 'always'
g. ɣudes 'always' (lit. daily, see section 5.3)

The adverb 'again' can be used to indicate both repetition (the eventuality repeats itself) and restitution (the original state of affairs is restored). For example, (60) could either mean that Zarema left the window slighly open again, as she has done before (the repetitive reading) or that the window is slightly open, as it was before, due to Zarema's action (the restitutive reading):

(60) Žigon aki r-aˤɣiƛ' xec-is Zarem-ä.
again window.ABS.IV IV-ajar leave-PST.WIT Zaema-ERG
'Zarema left the window ajar again.'
REPETITIVE: opened the window again
RESTITUTIVE: the window is again open

The two readings can be disambiguated by placing the adverb immediately before the constituent it takes scope over. Compare the ambiguous (60) and the unambiguous examples below; in (61a) 'again' precedes the adverb *r-aˤɣiƛ'*, and in (61b), it precedes the main verb.

[12] In fairy tales, these V-not-V forms often appear with the quotative affix *–ƛax,* which combines with non-witnessed verb forms (as opposed to *–ƛin*, which does not impose restrictions on the tense forms it combines with). See Ch. YY [Particles] and see also Imnajšvili (1963: 274).

(61) a. Aki žigon r-aˢɣiƛ’ xec-is Zarem-ä.
window.ABS.IV again IV-ajar leave-PST.WIT Zaema-ERG
‘Zarema left the window ajar again.’ (restitutive)

b. Aki r-aˢɣiƛ’ žigon xec-is Zarem-ä.
window.ABS.IV IV-ajar again leave-PST.WIT Zaema-ERG
‘Zarema left the window ajar again.’ (repetitive)

A number of adverbs with the general meaning ‘once’ or ‘rarely’ are derived from the adverbial stem *sos-* ‘once’; in particular,

(62) a. sosit’a (from sosi-t’a)
‘once’ once-COLL

b. sosi/sossi/sososi (possibly partial reduplication of sosi)
‘seldom’

c. sosoxay (from sos-o-x-āy)
‘occasionally’ once-OS-AD-ABL

The example below, from a fairy tale, illustrates the use of *sosit’a*:

(63) Neł-ä elu-r łi neƛ-xosi [yoł] ƛˢeb-a-x-äy
DEM.nI-ERG 1PL-LAT water.ABS.III give-PRS.PTCP be.PRS year-OS-AD-ABL
sosit’a el-ä neła-r y-ac’-ani-x kid teƛ-näy.
once 1PL-ERG DEM.nI-LAT II-eat-MASD-AD.ESS girl.ABS.II give-COND
‘It [dragon] gives us water if once a year we give him a girl for him to eat.’ (ʕAliqilič:49)

Event frequency can also be expressed by the adessive form of numerals, as in the example below:

(64) Maduhal łˢora-x y-ay-x.
neighbor.ABS.(II) three.OS-AD.ESS II-come-PRS
‘The neighbor has stopped by three times.’

The same form is used to express multiplication:

(65) Q’ˢuna-x q’ˢano uyno (yoł).
two.OS-AD.ESS two four be.PRS
‘Two by two is four.’

Ordinal numerals with the additive particle *–gon* form adverbials denoting ordered sequences. Compare *łˢora-x* ‘three times’ in example (64) above and *łˢono-äƛiru-gon* ‘thirdly’ in (66):

(66) neła sual-yo-r žawab łˢono-äƛiru-gon b-od-a
DEM.nI question-OS-LAT answer.ABS.III three-ORD-ADD III-do-INF
b-āy.
III-must

'This question should be addressed (anwered) in the third place.'

In texts, we also find a combination of the two strategies: the numeral in the adessive form combining with *äƛiru-gon*, as in the example below (the form *k'ox* is used in alternation with *q'ˤunax*):

(67) *pro₁* k'o-x-äƛiru-gon *pro₂* b-ok'-no.
pro.ERG two-AD.ESS-ORD-ADD *pro*.ABS.(III) III-hit-PST.nWIT
'(The hen) hit (the frog) for a second time.' (Onočun mamalayn:16)

The simple adverb *ži* can be used alone to denote 'already'; for example:

(68) B-äti-ru mašina ži q'ač'azi b-āq-inč'i.
III-turn-PST.PTCP car.ABS.III already repair III-become.FUT-NEG
'The overturned car is already beyond repair.'

It can also appear in combination with AGR-*uygon*, as in the next example. In that case, AGR-*uygon* must appear closer to the verb; therefore, (69c) is judged unacceptable:

(69) a. Mi ži Ø-uygon Ø-iš-ä?
2SG.ABS.(I) already I-already I-eat.ITR-PST.WIT.INTERR
b. Ži mi Ø-uygon Ø-iš-ä?
already 2SG.ABS.(I) I-already I-eat.ITR-PST.WIT.INTERR
'Have you already eaten?'
c. #Ži Ø-uygon ži Ø-iš-ä?
2SG.ABS.(I) I-already already I-eat.ITR-PST.WIT.INTERR

The adverb *žād* 'yet' is a negative polarity item, appearing only with negation:

(70) a. Ža žäd y-āk'i-nč'u/*y-āk'i.
DEM.ABS yet II-go.FUT-FUT.NEG/II-go-FUT
'She has not yet left.'
b. Dä-r žäd r-iy-x-*(ānu).
1SG-LAT yet IV-know-PRS-NEG

5.5 Adverbial phrases denoting reason, cause, or purpose

The majority of adverbial phrases denoting reason and cause are expressed by converbs (see Ch. YY [Adverbial clauses]). Purpose can also be expressed by infinitival or masdar clauses that appear as complements of control verbs (CH. YY [Clausal complements]) or as relative clauses (CH.YY [Relative clauses]). Noun phrases in two spatial forms can express the adverbial meanings of purpose and cause. The first is the sub-ablative form, which is used in a meaning comparable to the English 'for the sake of', but can also be interpreted as 'because of':

(71) Nes-ä ža micxir-yo-ƛ-āy r-odi-s.
DEM.I-ERG DEM.ABS.(IV) money-OS- SUB-ABL IV-do-PST.WIT
'He did that for the money.' (for the sake of money)

(72) Mežu-ƛ-āy babiw ħalt'-u-ł-er Ø-ik'i-nč'u.
2PL-SUB-ABL father.ABS.I work-OS-CONT-LAT I-go-PST.NEG
'Because of you, Father did not go to work.' (for your sake; because of you)

These examples show nouns proper in the sub-ablative form; masdar clauses, which constitute complex noun phrases, can also appear in the sub-ablative. For instance:

(73) Nes-ä ža [xabar b-iy-ani-]ƛ-āy r-odi-s.
DEM.I-ERG DEM.ABS.(IV) news.ABS.III III-know -ABL IV-do-PST.WIT
'He did that to find out the news.'

(74) [ħak'o-m-ƛe-r-ce šebin r-iqir-ani]-ƛ-äy
xinkal-OS-SUB-LAT-EQUAT thing.ABS.IV IV-catch-MASD-SUB-ABL
Ø-eynod-ani-x moči-n k'edi-n Ø-oq-äsi
I-work-MASD-AD.ESS place.ABS.III-and look.for-PFV.CVB I-begin-RES.PTCP
yoł.
be.PRS
'He began to look for a place to work because of the need to earn his daily bread.'
(Qʿay:9)

Causes and reasons that cannot be identified as a purpose set by a sentient agent do not appear in this form. Compare (72) and the following example, in which use of the sub-ablative form (*ʕabdalłiƛāy*) would entail that the main participant has control over his folly or had it set as his goal:

(75) *Nes-ä ža ʕabdalłi-ƛ-āy r-odi-s.
DEM.I-ERG DEM.ABS(.IV) foolishness-SUB-ABL IV-do-PST.WIT
('He did that out of foolishness.') (for the sake of foolishness)

In such instances, when the speaker needs to express a cause over which the participant has no control, Tsez uses noun phrases in the super-essive distal form. For example,

(76) Nes-ä ža ʕabdalłi-ƛ'-āz(a)
DEM.I-ERG DEM.ABS.(IV) foolishness-SUPER.ESS-DIST
r-odi-n r-äsu.
IV-do-PFV.CVB IV-may
'He probably did that out of foolishness.'

(77) Žuka hawa=baq'-yo-ƛ'-āz(a) awariya-bi r-oq-xo.
bad weather-OS-SUPER.ESS-DIST accident-PL.ABS.nIPL nIPL-become-PRS
'Accidents happen because of bad weather.'

Noun phrases in a spatial form expressing reason can be quite long and complex. Consider the following example, where two other adverbial phrases also appear in the same super-essive distal form to encode spatial relations proper ('on the left' and 'on the side'):

(78) Ža dä-r r-iy-s [huni-x
DEM.ABS(.IV) 1SG-LAT IV-know-PST.WIT road-AD.ESS

kut'yo-ƛ'-āza pu-ƛ'āza nuco-ƛ'o-si t'ut'
left.side-SUPER.ESS-DIST side-SUPER.ESS-DIST honey-SUPER-ATTR fly.ABS.III
b-ik'i-x zaw-ru-[łi-]ƛ'-āza].
III-go-IPFV.CVB be.PST-PST.PTCP-NMLZ-SUPER.ESS-DIST
'I knew that because a bee was flying at the right side of the road.' (Xanno, nesisgon łʿono užin:97)

Finally, masdar clauses can also appear in the super-essive to indicate reason, but this is very rare:

(79) ɣudi-asoƛ r-iq-ani-ƛ'-āz awariya-bi
weather.ABS.IV IV-get-MASD-SUPER.ESS-DIST accident-PL.ABS.nIPL
r-oq-si.
nIPL-become-PRS
'The accidents happened because the weather got bad.'

Various forms of the indeterminate *šidā* (the in-essive form of *sis* 'one') and of the indefinite pronoun *šebin* can also be used as adverbial phrases expressing reason/purpose and cause. Note that the form of the indefinite pronoun appears in the sub-ablative case for reason/purpose and in the super-essive distal case for expressing cause, paralleling the forms of the corresponding noun phrases above.

(80) a. šida-go(n)
why-CONTR.TOP
'for some reason'
b. šida-ƛa
why-TOP
'for a certain reason'
c. šida-kin
why-FOC
'for no reason' (negative polarity item)

(81) a. łina-ƛ-āy-n
what-SUB-ABL-INDEF
'for some reason'
b. łina-ƛ-āy-kin
what-SUB-ABL-FOC
'for no reason' (negative polarity item)

(82) a. łina-ƛ'-āz-no[13]
what-SUPER.ESS-DIST-INDEF
'on account of some cause'
b. łina-ƛ'-āz-ƛa
what- SUPER.ESS-DIST-TOP
'for certain causes'

[13] This form is rarely used.

b. łina-ƛ'-āz-kin
what- SUPER.ESS-DIST-FOC
'for no cause/reason' (negative polarity item)

For example:

(83) Žedu esa=risa[14] r-iy-x-ānu-xo-zo łina-ƛ-āy-n
DEM.PL.ABS whatever.thing.ABS.IV IV-know-PRS-NEG-ATTR.OBL what-SUB-ABL-INDEF
daʕba b-oy-s.
dispute.ABS.III III-do-PST.WIT
'They had a falling out for no good reason.'

The adverbial phrase 'for no reason' can also be expressed by the set phrase AGR-*oƛƛi* AGR-*āčizar,* whose decomposition and literal meaning are shown in (84a); however, our representation of the underlying interpretation should not be taken to imply that the phrase is still perceived as compositional.

(84) a. AGR-oƛƛi AGR-āči-z-ā-r
middle stay.PST.PTCP-OS-IN-LAT
"towards standing in the middle"
b. Eniw [y-oƛƛi=y-āčizār] uži-ƛ'-or bixzi y-oq-xo.
mother.ABS.II II-for no reason boy-SUPER-LAT angry II-become-PRS
'Mother is angry with the boy for no reason.'

The words denoting cause (*bahana*) and goal or purpose (*murad*) are nouns and are rarely used. Some examples:

(85) Šebi xel-mo-s bahana zow-ä?
what.ABS death-OS-GEN1 cause.ABS.III be.PST-PST.WIT-INTERR
'What was the cause of death?'
(86) Nesi-s murad ānu.
DEM.I-GEN1 goal.ABS.III be.PRS.NEG
'He does not have a purpose/goal.'

The set expression *šidaƛin eƛiłiri* 'the reason being; so' (lit.: why-QUOT say-COND.IRR.CVB) is used at the beginning of a clause, regardless of its predicate type or finiteness. For instance, in (87), this expression is used in a finite clause. Unlike other adverbs, *šidaƛin eƛiłiri* does not appear clause-medially:

(87) a. Šidaƛin eƛiłiri šayt'an-z-ä dä-r ʕaq'uba
the.reason.being devil-OS.PL-ERG 1PL-LAT torment.ABS.III
neƛ-xo.
give-PRS
'The reason being that demons torment me.' (Riyxanoku:25)
b. *Šayt'an-z-ä dä-r šidaƛin eƛiłiri ʕaq'uba

[14] *Esa-risa* literally means 'to say-to take'.

devil-OS.PL-ERG 1PL-LAT the.reason.being torment.ABS.III
neƛ-xo.
give-PRS

5.6 Viewpoint adverbials and expression of probability and possibility

Viewpoint adverbials are often expressed by noun phrases in various oblique forms and by attributive phrases with adjectival or participial heads. For noun phrases, the most common form expressing viewpoint is the form of the ad-lative, for example:

(88) [Dä-z pikru-x-or] nesi-r kitay-s mec
1SG-GEN2 thought-AD-LAT DEM.I-LAT China-GEN1 language.ABS.III
b-ig b-iy-x.
III-well III-know-PRS
'In my opinion (lit.: by my thought), he knows the Chinese language well.'

Noun phrases expressing viewpoint can be quite complex; a common form is the nominalized ad-lative past participle (cf. Imnajšvili 1963: 226-227). Naturally occurring examples do not include the nominalized *–łi*, but this suffix can be artificially restored, indicating that adverbial clauses like the ones shown below are ad-lative noun phrases:

(89) Xizyo [babi-y-ä äƛi-ru-[łi-]xo-r] ža uži
then father-OS-ERG say-PST.PTCP-NMLZ-AD-LAT DEM boy.ABS.I
bazargan-za-r teƛ-no.
merchant-OS.PL-LAT give-PST.nWIT
'And then, according to Father's instructions, he gave the boy to the merchants.' (Moƛu:14)

(90) [Už-ä mäˁłi-ru-[łi-]xo-r] hemedur-tow dä-r
boy-ERG teach-PST.PTCP-NMLZ-AD-LAT so-FOC 1SG-LAT
moƛa-ł r-ukay-s.
dream-CONT.ESS IV-see-PST.WIT
'I saw it in my dream just as the boy said (lit.: taught).' (Moƛu:48)

Examples of attributive phrases used to express viewpoint adverbials:[15]

(91) [Taliħq'ayaw] meži dä-r b-ukay-nč'i.
unfortunately 2PL.ABS 1SG-LAT IPL-see-FUT.NEG
'Unfortunately I won't see you.'

(92) Taliħƛin di idu-gon zow-s.
fortunately 1SG.ABS at home-CONTR.TOP be.PST-PST.WIT
'Fortunately, I was already at home.'

(93) a. Neširu [čara ānu-si] hor-o
in.the.evening necessity.ABS.IV be.NEG-ATTR come-IMPER
el-zo-x-or.

[15] In (91) and (92), the viewpoint adverbials are formed on the basis of the noun *taliħ* 'happiness'.

1PL-ATTR.OBL-AD-LAT

b. Neširu [čara ānu-zo-ł]
in.the.evening necessity.ABS.IV be.NEG-ATTR.OBL-CONT.ESS
hor-o el-zo-x-or.
come-IMPER 1PL-ATTR.OBL-AD-LAT
'For sure come to our house tonight!'

The expression of possibility and probabiliy is not limited to adverbial phrases; these notions can also be conveyed by particles (see CH.YY[Particles]), adverbial clauses (see CH. YY[Adverbial clauses]), and dedicated verb forms, particularly the optative and the potential (see CH.YY [verb tense]). Within the adverbials, common expressions include *hudun* 'probably' (from *hudu* 'yes'); *umgo/ungo* 'indeed, truly', and *beɣula/behila* 'maybe'. Consider the following examples:

(94) El-ä hudun arbaʕ-ƛ'o-r łiy-ir-an
1PL-ERG probably Wednesday-SUPER-LAT end-CAUS-FUT.DEF
yedu ħalt'i.
DEM work.ABS.III
'We will probably finish this work by Wednesday.'

The adverbial *umgo/ungo*, which often appears with the focus particle *–tow*, must precede the focused constituent. For example, in the sentence below,, the focus is on the embedded predicate:

(95) Dä-r [huł neł-ä micxir umgo(-tow)
1SG-LAT yesterday DEM.nI-ERG money.ABS.III indeed-FOC
b-iqä-ru-łi] r-iy-x.
III-catch-PST.PTCP-NMLZ IV-know-PRS
'I know that she did in fact receive the money yesterday.'

The constituent under the scope of *umgo/ungo* and AGR-*uy* is the item that is asserted in an affirmative sentence, questioned in an interrogative sentence, and negated in a negative one. If the questioned constituent is the verb phrase, the adverbial also receives the interrogative marker—compare (96a), where the constituent in question is Muhammed, and (96b), where it is the verb phrase:

(96) a. Mi umgo-tow mahama-qo-r-ä xabaryay-x?
2SG.ABS indeed-FOC Muhammed-POSS-LAT-INTERR speak-PRS
'Are you going to talk to MUHAMMED?'

b. Mi mahama-qo-r umgo-tow-ä xabaryay-x?
2SG.ABS Muhammed-POSS-LAT indeed-FOC-INTERR speak-PRS
'Are you definitely going to talk to Muhammed?'

The adverbial *umgo/ungo* is probably derived diachronically from the particle AGR-*uy* and the contrastive suffix *–go*; AGR-*uy* serves as the validator clitic and occurs only in root clauses. We discuss this particle in more detail in CH.YY[Particles]).

6 Postpositional phrases

6.1 Adverbs vs. postpositions

It is not always easy to separate adverbs and postpositions in Tsez, and this distinction is particularly difficult with adverbial expressions of place (and by extension, temporal sequence), because many such expressions naturally encode the relationship between two entities — figure and ground. The main difficulty has to do with the fact that locatives and some other adverbials can occur on their own or can follow a noun in one of the spatial forms. In the latter case, the adverb is optional. Consider the following examples:

(97) a. Aɣi ƛ'iri č'iwƛi-x.
bird.ABS.III up chirp-PRS
'A bird is chirping above.'
b. ɣun-o-ƛ' (ƛ'iri) aɣi č'iwƛi-x.
tree-OS-SUPER.ESS up bird.ABS.III chirp-PRS
'A bird is chirping up on the tree.'

If (97a) is used to describe the bird in relation to a tree, the bird is understood to be above the tree, not in the tree; in (97b), the bird is up on the tree, and *ƛ'iri* can be easily omitted. The difference in meaning suggests that the use of *ƛ'iri* in (97a) is adverbial, while the use in (97b) is postpositional. Likewise, the form *bitor* is ambiguous between the readings 'there (in the direction of)' and 'because of, on account of'. In the former meaning, it is likely to be adverbial, as it does not have to have a complement. In the latter meaning, it occurs with a nominal complement and appears to be a well-behaved postposition, but is nevertheless itself omissible:

(98) a. Di bitor Ø-izi-s.
1SG.ABS.(I) away I-rise-PST.WIT
'I (man speaking) went away.'
b. Dow-ƛ-āy (bitor) Ø-ik'i-nč'u.
2SG-SUB-ABL because I-go-PST.NEG
'I did not go because of you.'

However not all words that appear ambiguous between an adverb and a postposition show differences in meaning, and the meaning criterion is quite limited in its scope.

A number of ambiguous items combine with particular forms of nouns, which suggests that they are postpositions (adverbs do not take complements and do not impose selectional restrictions on the lexical items they combine with). For example, the words *purħo/purłāz* 'near, by, beside' combine only with animate nouns in the apud-essive:[16]

(99) a. Surat-yo-ł di sult'an-de/*sult'an-xo/*sult'an-qo
picture-OS-CONT.ESS 1SG.ABS S-APUD.ESS/S-APUD.ESS/S-POSS.ESS
purłāz yoł.

[16] The expression *ħonde purłāz* 'beside the mountain' seems to be an exception, but one could argue that the mountain is somehow personified.

beside be.PRS
'In the picture I am beside/next to Sultan.'
b. *Surat-yo-ł di k'onk'a-de purłāz
picture-OS-CONT.ESS 1SG.ABS bicycle-APUD.ESS beside
yoł.
be.PRS
('In the picture I am beside/next to the bicycle.')

Assuming this criterion is more reliable, we may identify *purħo/purłāz* as postpositions. However, they can still occur without a nominal complement, suggesting that Tsez allows the omission of complements of postpositions. We know that it allows the omission of arguments, but the omission of adpositional complements is cross-linguistically more unusual. The following examples show that such omission is indeed possible in Tsez:

(100) a. Žaˁquł-no hamaɣ-bi (sult'an-de) purħo yoł
today-TOP friend-PL.ABS.IPL/nIPL S-APUD.ESS beside be.PRS
amma huł-gon žek'u-s žek'u-bi sult'an-de
but yesterday-CONTR.TOP man-GEN1 man-ANS.PL.1PL S-APUD.ESS
purłāz zow-s.
beside be.PST-PST.WIT
b. Žaˁquł-no hamaɣ-bi sult'an-de purħo yoł
today-TOP friend-PL.ABS.IPL/nIPL S-APUD.ESS beside be.PRS
amma huł-gon žek'u-s žek'u-bi (sult'an-de)
but yesterday-CONTR.TOP man-GEN1 man-ANS.PL.IPL S-APUD.ESS
purłāz b-iči-xosi zow-s.
beside IPL-stay-PRS.PTCP be.PST-PST.WIT
'Today, friends are standing beside Sultan, but yesterday, strangers were standing beside (Sultan).'

(101) a. Pat'i (ʕali-ł) xizazā, eniw
Fatima.ABS.II Ali-SUB.ESS behind mother.ABS.II
ʕali-ł adazā y-iči-x.
Ali-SUB.ESS in.front II-stay-PRS
b. Pat'i ʕali-ł xizazā, eniw
Fatima.ABS.II Ali-SUB.ESS behind mother.ABS.II
(ʕali-ł) adazā y-iči-x.
Ali-SUB.ESS in.front II-stay-PRS
'Fatima was standing behind Ali, and mother, in front of him.'

Therefore, in the following example, it is possible to imagine a missing complement of *purħo*:

(102) Xex-bi *pro* purħo zow-s.
child-PL.ABS.nIPL beside be.PST-PST.WIT
'The children were on the sidelines.'

Omission works both ways in putative postpositional phrases; not only can the nominal be omitted, as we just showed, but the adverb/postposition can also be omitted in certain cases,

without a perceptible change in meaning. We present multiple examples of adverb/postposition omission in section 6.2 below. Ideally, this criterion could be used to show that elements that undergo omission are not heads, and hence not postpositons. However, we see two considerations against using this criterion. First, silent heads are generally possible, and the omission of P would be no exception. Second, as the data in section 6.2 suggest, the omissibility of a particular adverb/postposition may also be sensitive to interpretation.

Yet another criterion that can be used to distinguish adverbs from postpositions has to do with displacement. It should presumably be possible to separate adverbs from their associated nominals, whereas postpositions and nominals should be constrained to appear together. Compare example (97b) above to the following example, where the noun in the spatial form is separated from the adverb:[17]

(103) ɣun-o-ƛ' aɣi ƛ'iri č'iwƛi-x.
tree-OS-SUPER.ESS bird.ABS.III up chirp-PRS
'A bird is chirping up there on the tree.'

Similarly, in the following sentence, the spatial noun and the word *sadaq* 'together' can be separated:

(104) a. Kid eni-ya-de sadaq y-ay-si.
girl.ABS.II mother-OS-APUD.ESS with/together II-come-PST.WIT
b. Eni-ya-de kid sadaq y-ay-si.
mother-OS-APUD.ESS girl.ABS.II with/together II-come-PST.WIT
'The girl came together with Mother.'

In contrast, compare the sentences below, in which *ˁolo* 'because of' and *dandi-(r)* 'across' cannot be separated from the nominals they select:

(105) a. Dow-ƛ-āy ˁolo xexbi ˁoƛ'u-s.
2SG-SUB.ESS because child.ABS.III fall-PST.WIT
'The child fell because of you.'
b. *Dow-ƛ-āy xexbi ˁolo ˁoƛ'u-s.
house-OS-SUB.ESS child.ABS.III because fall-PST.WIT
(106) a. Dow-ƛ-āy ˁolo xexbi ˁoƛ'u-s.
2SG-SUB.ESS because child.ABS.III fall-PST.WIT
'The child fell because of you.'
b. *Dow-ƛ-āy xexbi ˁolo ˁoƛ'u-s.
house-OS-SUB.ESS child.ABS.III because fall-PST.WIT
(107) a. ɣˁutk'-o-ƛ dandir mašina eqr-o.
house-OS-SUB.ESS across/against car.ABS.III put-IMPER
'Park the car across from the house.'

[17] Testing the separation of a nominal and associated postposition/adverb is limited by the fact that adverbs denoting specific location or order generally do not appear postverbally (see Ch. YY [WORD ORDER]). Thus, all the dislocations have to happen in the preverbal domain.

b.	*ɣˤutk’-o-ƛ	mašina	dandir	eqr-o.
	house-OS-SUB.ESS	car.ABS.III	across/against	put-IMPER

Using this criterion, we can qualify the folowing words as more postposition-like, as they cannot separate from their associated nominals:

(108) a. adāz/adāy
in front, ahead, before (location in space or time)
b. bitor
away
c. dandi/dandir
across, against
d. ˤolo
because of
e. purħo/purłāz (with animate)
beside, next to
f. q’ˤida
under
g. šet’u/šet’ur
around
h. soder
after, following
i. xizāz/xizāy
after, behind (location in space or time)

In contrast, the following lexical items can separate from their associated nominals, which arguably makes them more adverb-like:[18]

(109) a. igo/igor/igāy
around, nearby
b. ƛ’iri/ƛ’iray
above
c. madaħ/madaħor
outside/in the direction of outside
d. sadaq
together, with
e. taq/taqor/taqāy

[18] In both sets of lexical items, (108) and (109), the number of options increases when these lexical items combine with spatial suffixes—consider *teła/telxor/tełay/tełäzay* in (80f), which can be analyzed as in-essive, ad-lative or in-ablative (without or with the distal affix) forms. What remains unclear is whether or not this (at least diachronically) clear sequence of affixes still has a compositional meaning in the current language. Furthermore, some of the items that we identify as more adverb-like have direct correspondents among the postposition-like; for instance, *xizor* (109h), and *xizāy/xizāz* in (108i).

over there, on the other side/to the other side/from the other side

f. teł/tełā/tełxor/tełāy/tełäzay
inside/in the direction of inside/from inside/from inside

g. waħħo/ waħ(ħ)or/wˢałāy
under, below

h. xizor
behind

i. xizyo/xizyoƛ’ay
later, next/next time

However, the adverbial status of these words may still be compatible with their double function, as adverbs and as postpositions (or alternatively, as intransitive and transitive postpositions).

Yet another difference between postpositions proper and adverbs has to do with the way they participate in coordination. In order to apply the coordination diagnostic, we must recognize two separate subtypes of coordination: coordination of two or more postpositional phrases each of which is headed by the same postposition, and coordination of two or more postpositional phrases headed by different postpositions.

When coordinated postpositional phrases are headed by the same postposition, the lexical items listed in (109) combine with the coordinating *–n* directly, and the associated nominals are not marked for coordination. The adverb/postposition, although identical, cannot be omitted:

(110) a. eni-ya-de sadaq-no kid-ba-de
mother-OS-APUD.ESS together-and girl-OS-APUD.ESS
sadaq-no
together-and
‘with mother and daughter’

b. *eni-ya-de-n (sadaq) kid-ba-de-n
mother-OS-APUD.ESS-and together girl-OS-APUD.ESS
sadaq
sadaq-no

(111) a. q’oc’oƛ-ā teł-no ƛoħ-ā teł-no
barrel-IN.ESS inside-and pot-IN.ESS inside-and
‘inside the barrel and the pot’

b. *q’oc’oƛ-ā-n (teł) ƛoħ-ā-n teł
barrel-IN.ESS-and inside pot-IN.ESS-and inside

In contrast, the lexical items that we identified as postpositions proper (108) on the basis of their inability to dislocate away from the associated noun never combine with *–n(o)* ‘and’. Instead, this linking element attaches to the complement noun. The adverb/postposition in the first conjunct can be omitted:

(112) a. istowli-ƛ-no (xizāz) iškap-yo-ƛ-no xizāz
table-SUB.ESS-and behind wardrobe-OS-SUB.ESS-and behind
‘behind the table and wardrobe’

b. *istowli-ƛ xizāz-no iškap-yo-ƛ xizāz-no
table-SUB.ESS behind-and wardrobe-OS-SUB.ESS-and behind

(113) a. t'et'ra-ni-ƛ-āy-no (ˁolo) micxir-ƛ-āy-no ˁolo
study-MASD-SUB-ABL-and money-SUB-ABL-and because of
'because of studies and money'

b. *t'et'ra-ni-ƛ-āy ˁolo-n micxir-ƛ-āy ˁolo-n
study-MASD-SUB-ABL because-and money-SUB-ABL because of-and

This difference in coordination is typologically unusual; we would expect the coordinating enclitic *–n(o)* to appear on the adverbial/postpositional head. We hypothesize that the pattern in (112) and (113) may have to do with the redundancy of such items as *xizāz* or *ˁolo.* It is already possible to arrive at the relevant locational or causal interpretation just on the basis of the respective sub-essive and sub-ablative forms.

If two or more phrases headed by a postposition/adverb are conjoined, the linking enclitic *–n(o)* can appear twice, but marking on the postposition/adverb is necessary. Thus:

(114) istowli-ƛ(-no) xizāz-no q'ˁuri-ƛ'o(-n) ƛ'iri-n
table-SUB.ESS-and behind-and chair-SUPER.ESS-and above-and
'behind the table and above the chair'

To summarize, the diagnostics available to us (omission of the complement, separability, coordination) do not produce unequivocal results. One could take the differences presented here to reveal the boundary separating adverbs from postpositions, or one might conclude that a number of lexical items are ambiguous, either between adverbs and postpositions, or between intransitive and transitive postpositions.

6.2 Postpositional or suffixes?

Two items that seem to be postpositional in nature apparently take absolutive complements. However, the status of these items as postpositions is not entirely clear. The form *łun* 'as; in the capacity as' is a borrowing from Avar, where it can combine with oblique forms. It may be in transition between a postposition and an affix; for Hinuq, Forker (2013: 432) characterizes *łun* as an enclitic; Creissels (2010) identifies the cognate form in Akhvakh as a case-marking suffix expressing a temporary state of the referent. For Tsez, we tentatively analyze *łun* as a suffix that attaches to the direct form of nouns (that's how we represent it in the examples above). If this analysis is on the right track, *łun* does not pose a counterexample to the generalization that postpositions take complements in cases other than the absolutive.

The main use of *łun* in Tsez is to encode the meaning 'in the capacity of; considered as'. It often combines with nouns or noun phrases denoting professions or occupations, as in (115) below. However, it can also combine with abstract nouns denoting professions, as in (116).[19]

[19] In examples (115)–(117), the predicates are intransitive, with the subject in the absolutive and the phrase headed by *łun* interpreted as an adjunct. In (118), the compound verb *rik'zi* AGR-*iy*- is transitive, with the phrase headed by *łun* an adjunct as well.

(115) Ža reyun-os bet'er-łun wišzi er-si.
DEM.ABS district-GEN1 head-as appoint set.up-PST.WIT
'They appointed him the head of the district.'

(116) Uži-bi šopir-łi-łun b-oq-xo
boy-PL.ABS.IPL driver-NMLZ-as IPL-become-PRS
'The boys work as drivers.'

(117) Ža best'al-łun Ø-aˁqił-si.
DEM.ABS orphan-as I-grow-PST.WIT
'He grew up an orphan.'

(118) Nāzon maskuwa bercinaw šahar-łun rik'zi
all.ERG Moscow.ABS.III beautiful city-as count
b-iy-x.
III-know-PRS
'All consider Moscow a beautiful city.'

Forker (2013: 432-433) reports that *łun* in Hinuq can also combine with participial forms, and at least in one instance, with a noun phrase in a spatial form (her example (772b)). We have not been able to observe similar uses in Tsez.

Another Avar borrowing is a longer postposition of which *łun* is a subcomponent*: sababłun* 'for the sake of, because of, on the account of'.[20] This form is used rarely and also takes an absolutive complement, which seems to alternate with a genitive:

(119) a. Xexbi sababłun Ø-ay.
children.ABS for the sake of I-come.IMPER

b. Xex-za-s sababłun Ø-ay.
children-OS-GEN1 for the sake of I-come.IMPER
'Come for the sake of the children.'

7 Exception phrases

An example of the exceptive construction in English is as follows, where *except one* is the exception phrase introduced by the exceptive marker (*except*), and *all children* is the standard of comparison:

(120) All children, except one, grow up.
STANDARD OF COMPARISON EXCEPTION PHRASE

Tsez exceptive markers include *xecin* 'except, beside', *λexuzaλ'or* 'except, beside', *gurow/gurew* 'except', and *taraw* 'except' (the latter two are used only with negative predicates). We separate exception phrases from clear adverbial phrases and from clear postpositional phrases for several

[20] This postposition can be decomposed into the noun *sabab* 'reason' and the postposition *łun.*

reasons. First, although the exceptive markers *xecin* and *ƛexuzaƛ'or* resemble postpositions in that they combine with noun phrases, *ƛexuzaƛ'or* is unlike a postpostion in that it does not select the case of its complement. Meanwhile, *gurow/gurew* and *taraw* can combine with other categories, not just noun phrases. Next, unlike genuine adverbs, the words meaning 'except', 'but' cannot appear without or be separated from the complement whose content they delimit. There are differences among the existing exception phrases in Tsez that suggest that these items are not a homogenous group, but we present them all together on the basis of their general meaning.

The lexical item *xecin* 'except' is a converbal form of the verb *xec-* 'leave behind', whose use is illustrated in (121), where it takes the absolutive object. This particular converbal form may be undergoing a re-analysis as a special exceptive marker, but it has not changed its case-assigning properties; it always combines with a noun phrase in the absolutive and cannot be separated from it (122b):

(121) Mariyat-ä t'ek' iškol-ä xec-si.
Mariyat-ERG book.ABS.II school-IN.ESS leave-PST.WIT
'Mariyat left the book at school.'

(122) a. Eniw xecin nāsin kino-me-ł-xor
mother.ABS.II except ALL.ABS.IPL cinema-OS-CONT-VERS
b-ik'i-s.
IPL-go-PST.WIT
'Aside from mother, everyone went to the movies.'

b. *Eniw nāsin kino-me-ł-xor xecin
mother.ABS.II all.ABS.IPL cinema-OS-CONT-VERS except
b-ik'i-s.
IPL-go-PST.WIT

The exceptive marker *xecin* always combines with the absolutive; in (122a), the case of the exception phrase and the case of the standard of comparison match, but such matching is not required. In the next example, the standard of comparison appears in a form different from the absolutive:

(123) Eli mariyat xecin nāzon c'alduqan-za-qo-r
1PL.ABS mariyat.ABS.II except all.OBL student-OS.PL-POSS-LAT
xabaryay-s.
talk-PST.WIT
'We talked to all the students except Mariyat.'

Xecin only combines with noun phrases, so if the exception phrase is not an NP, it has to be substantivized or nominalized. For example, in (124), the verb must appear in the infinitival or masdar form, and cannot remain finite:

(124) ħalt'izi y-oq-a/ ħalt'izi y-oq-ani/ *ħalt'izi y-oq-xo
work II-become-INF/work II-become-MASD/work II-become-PRS
xecin y-oq-xo ža nān-tew y-utił-xo.

except II-become-PRS DEM.ABS.(II) somewhere-FOC II-manage-PRS
'She does everything except working.'

The exceptive *ƛexu-za-ƛ'-or* is a nominalization of the verb *ƛex-* 'remain, stay behind' in the super-lative (*ƛ'-or*). The markers *ƛexuzaƛ'or, gurow/gurew* and *taraw* combine with noun phrases in any form; the case of the noun phrase has to match the case of the phrase that serves as the standard of comparison. We will consider *ƛexuzaƛ'or* first. Compare example (123) with *xecin* and the following example with *ƛexuzaƛ'or*, where the standard of comparison and the noun phrase in the exception phrase both appear in the poss-lative:

(125) Eli mariyat-qo-r ƛexuzaƛ'or c'alduqan-za-qo-r
1PL.ABS mariyat-POSS-LAT except student-OS.PL-POSS-LAT
xabaryay-nč'i.
talk-PST.WIT.NEG
'We did not talk to the students except Mariyat.'

(126) Eli ɣudes ħalt'-o-ł-xor b-ik'i-x ħat'an-ƛ'o
1PL.ABS daily work-OS-CONT-VERS IPL-go-PRS Sunday-SUPER.ESS
ƛexuzaƛ'or.
except
'We go to work every day except Sunday.'

These examples show that the exceptive marker *ƛexuzaƛ'or* is compatible with both affirmative and negative predicates; the same goes for *xecin.* By contrast, the exceptive markers *taraw* and *gurow/gurew* are negative polarity items; they can only be licensed in the presence of a negation main predicate and they cannot occur in questions.

Consider the following examples. In (127), *taraw/gurow* combines with the ergative, and the clause also has the ergative subject *łukin*, a negative polarity item:

(127) ƛ'iri b-äs-ru-ni ħalt'i aħmad-ä taraw/gurow łu-kin
above III-take-PST.PTCP-DEF work.ABS.III Ahmed-ERG except/except who.ERG-FOC
b-oy-inč'u/*b-oy-s.
III-do-PST.NEG/ III-do-PST.WIT
'Nobody except Ahmed did the work they took upon themselves.'

In the proverb in (128), *taraw* also occurs with the ergative; the subject of the main clause is simply understood:

(128) Šud-ä taraw žek'u-s ʕamal b-it'zi b-äd-inč'i.
grave-ERG except man-GEN1 character.ABS.III III-straight III-do.FUT-NEG
'You can't teach an old dog new tricks.' (lit.: Nothing but the grave will straighten out the man's nature/character)

Similarly, in (129), *taraw* combines with the lative experiencer, and the standard-of-comparison experiencer is presupposed:

(129) Allah-e-r taraw r-āy-inč'i.
God-OS-LAT except IV-know.FUT-NEG
'Who knows.' (lit.: nobody but God will know (smth.))

Taraw and *gurow/gurew* can combine with noun phrases (as above) as well as adverbial phrases:

(130) Sossi gurow b-äk'-inč'i meži elo-r.
once except IPL-go.FUT-NEG 2PL.ABS.IPL there-LAT
'You will only go there once.' (lit.: you will not go there except one time)

(131) ƛirba ħuł taraw maduhal-qo-r xabaryay-nč'u.
guest.ABS.I/II yesterday except neighbor-POSS-LAT talk-PST.WIT.NEG
'Except yesterday, the guest did not talk to the neighbor.'

The two constituents in the exceptive phrase — the standard of comparison and the exception phrase — must belong to the same category. Consider the following example, where the standard of comparison is a noun phrase (*didiwnokin mumpaʕat* 'any benefit) and the exception phrase is a verbal nominalization:

(132) Neł-q-äy didiwnokin mumpaʕat ānu, ʕadadä
DEM.nI-POSS-ABL any.ATTR benefit.ABS.III be.PRS.NEG in.vain
käki-ru-łi gurow.
feed-PTS.PTCP-NMLZ except
'What good is it to have it (calf) except that we feed it for no good reason.' (lit.: there is no benefit from it except feeding in vain) (Riynoxu:35)

Recall that *taraw* and *gurow/gurew* require negation on the main predicate. Although such sentences are judged to be awkward, it is possible to put a verb in the affirmative before *taraw* or *gurew/gurow*. Compare (127) with the following examples in which the affirmative and the negative versions of *boy-* are contrasted explicitly.[21]

(133) ƛ'iri b-äs-ru-ni ħalt'i aħmad-ä b-oy-si
above III-take-PST.PTCP-DEF work.ABS.III Ahmed-ERG III-do-PST.WIT
taraw/gurow łukin b-oy-inč'u.
except/except anyone.ERG III-do-PST.WIT.NEG
'Ahmed did the work he took upon himself, nobody (else) did.'

Polarity reversal is typical of so-called free exceptives (clausal exceptives), in which the exceptive phrase expresses an exception to a generalization stated in a separate clause (Hoeksema 1995; Soltan 2014). The properties of *taraw* and *gurow/gurew* exception phrases suggest that they are free exceptives. In contrast, the exception phrases headed by *xecin* and *ƛexuzaƛ'or* seem to fit the profile of phrasal exceptives; they are not associated with polarity reversals, they are more restricted in the categories they can combine with (only noun phrases),

[21] As we show in CH.YY[Adv clauses], Tsez has extremely limited ellipsis of finite verb forms; however, the omission of the affirmative version of the finite verb in examples such as (133) appears to be a plausible source of the exceptive constructions with *gurow* and *taraw*.

and they cannot combine with another predicate. Compare the grammatical sentence in (133) and the following ungrammatical sentences:

(134) *Eniw y-ik'i-nči xecin nāsin kino-me-ł-xor
mother.ABS.II II-go-PST.NEG except ALL.ABS.IPL cinema-OS-CONT-VERS
b-ik'i-s.
IPL-go-PST.WIT
('Aside from Mother, everyone went to the movies.')

(135) *Eli ɣudes ħalt'-u-ł-xor b-ik'i-x ħat'an-ƛ'o
1PL.ABS daily work-OS-CONT-VERS IPL-go-PRS Sunday-SUPER.ESS
ƛexuzaƛ'or b-ik'i-nč'u.
except IPL-go-PRS.NEG
('We go to work every day except Sunday.')

Part 2: Clauses

Basic clause types
Interrogatives
Exclamatives

Basic clause types

1. Argument structure and verb types: General remarks

Like other languages of the Nakh-Dagestanian family, Tsez displays a robust correspondence between intransitive and transitive verbs: most (but not all) intransitives have corresponding transitives, and vice versa. In terms of the direction of derivation, there is a preference for basic one-place verbs or predicates with derived transitive forms. Thus, we can characterize Tsez as an "intransitive language" (see Comrie 2000a, b for a discussion, and see Ch. YY [VERB derivation]). Because Tsez has an extensive set of spatial markers, it tends to avoid unspecified local arguments; as a consequence, local subjects, as in *Berlin was swarming with tourists* or or local objects as in *They entered the cave,* are not observed.

We have not been able to observe instances of non-standard valence patterns in which a verb fails to take an absolutive argument (cf. Haspelmath 1993: 269, 280ff. for such patterns in Lezgian). A possible exception to this statement arises with the modal verb AGR-*äsu*/AGR-*esu*, which is discussed in CH. YY [Clausal complements].

All intransitive verbs take an absolutive subject, although this fact may be obscured by argument drop (a common phenomenon in Tsez, allowing any contextually recoverable argument to be omitted) and by the infrequency of absolutive agreement, which is only visible on a subset of verbs and predicative complements. Since both subjects and objects in Tsez can be discontinuous (see Ch. YY [Noun phrase]), discontinuity cannot be applied as a subject diagnostic either. In the discussion below, we will present evidence for subjecthood that draws on the individual subtypes of intransitive verbs (section 2). Transitive verbs take ergative and absolutive arguments (see section 3), and regardless of their argument structure, all verbs agree with the absolutive argument. For details of Tsez agreement, see CH. YY [Agreement]. Finally, there are several specialized constructions, including the potential construction (section 3.2) and the affective construction (section 5).

Unlike other Dagestanian languages, Tsez does not have labile verbs, i.e. verbs which can be used both as transitives and intransitives (see Erschler 2014 for a bibliography and short discussion, and see Forker 2013: 492-494 for such verbs in the closely related language Hinuq). Thus, members of the inchoative-causative alternation, such as the English *melt* or *dry,* are always distinguishable in Tsez by their morphology. Tsez also diverges from other languages in its group in that it does not have antipassives (see Forker 2013: 519-522 on Hinuq antipassive; van den Berg 2000 on Bezhta antipassive).

In this chapter, we concentrate only on verbs that take noun-phrase arguments; verbs that take clausal arguments are discussed in Ch. YY [Clausal complements]. Many of the same verbs appear in both chapters, and in fact, some examples in this chapter show clausal arguments. There is only a small subset of modal verbs that co-occur exclusively with clausal complements. Otherwise, all verbs capable of combining with a clausal argument can also take noun phrases in the same argument position.

In the discussion of argument structure below, we will make the following distinctions:

(i) between intransitive, transitive, and ditransitive verbs—these will be discussed in separate sections
(ii) between simple and complex (compound) verbs

Within complex verbs, there is a further distinction based on the category of the predicative complement that occurs with the light verb (the intransitive AGR-*oq*- 'become', the transitive AGR-*od*- 'do', and the ditransitive 'give'). When a predicative complement is expressed by a noun in the absolutive, that noun fills the absolutive position and the verb agrees with it. Consequently, complex verbs with AGR-*oq*- have their single argument position filled; complex verbs with AGR-*od*- have their absolutive object position filled and only the ergative slot unfilled. Other types of predicative complements do not fill an argument slot and do not determine agreement. See CH. YY [Predicate phrase] for further discussion.

In addressing argument structure, it is hard to completely disregard the grammatical functions associated with various arguments, so some of that discussion will be brought up in this chapter.

2. Intransitive verbs

2.1. Unergatives vs. unaccusatives

Intransitive verbs always have an absolutive argument, which can be omitted when contextually recoverable.

Based on a combination of morphological and semantic characteristics, we can divide Tsez intransitive verbs into unergatives and unaccusatives. Unergative verbs can receive the frequentative/iterative suffix –*nad*-; such verbs are typically agentive, which is a common patter for unergatives cross-linguistically. However, as (3) shows, unergatives do not necessarily have an animate subject.

(1) a. Bˢeλ' r-aˢq'u r-et'u-x.
sheep.PL.ABS.nIPL nIPL-much nIPL-tear.away-PRS
'The sheep separate/tear away a lot.'
b. Bˢeλ' r-aˢq'u r-et'u-nay-x.
sheep.PL.ABS.nIPL nIPL-much nIPL-tear.away-ITER-PRS
'The sheep often separate/tear away.'

(2) a. Uži-bi k'oλi-s.
boy-PL.ABS.IPL run-PST.WIT
'The boys ran.'
b. Uži-bi k'oλa-nay-s.
boy-PL.ABS.IPL run-ITER-PST.WIT
'The boys kept running.'

(3) a. łi čaˢλi-x.
water.ABS.IV jet-PRS

'Water is jetting.'

b. łi ča^{ʕ}ƛa-nay-x.
water.ABS.IV jet-ITER-PRS
'Water keeps jetting.'

A number of onomatopoetic verbs describing sounds (laughing, braying, clucking, croaking, chirping, etc.) also form iteratives and therefore qualify as unergatives, for example:

(4) a. B^{ʕ}eƛ' b^{ʕ}eʕeł'i-x.
sheep.ABS.IV bleat-PRS
b. B^{ʕ}eƛ' b^{ʕ}eʕeł'a-nay-x.
sheep.ABS.IV bleat-ITER-PRS
'(The) sheep are bleating.'

The suffix *–nad-* is impossible with unaccusatives, and which additionally often have non-agentive semantics. Compare the unergatives above and the unaccusatives in the following examples:

(5) a. Ža čanya b-a^{ʕ}q'u b-eti-x.
DEM goat.ABS.III III-much III-disappear-PRS
'This goat is often lost.'
b. *Ža čanya b-a^{ʕ}q'u b-eti-nay-x.
DEM goat.ABS.III III-much III-disappear-ITER-PRS
(6) a. Buq č'ur-si.
sun.ABS.III shine-PST.WIT
'The sun was shining.'
b. *Buq č'ura-nay-s.
sun.ABS.III shine-ITER-PST.WIT

Quite a few unaccusative verbs have the intransitive suffixes *–l-* or *–x-,* which are typical for verbs derived from adjectives or adverbs (see CH. YY [verb derivation]). Regardless of the agent-like or patient-like status of their sole argument, intransitive verbs all have subjects in the absolutive; there is no evidence of split intransitivity in terms of argument realization.

A significant number of complex intransitive predicates are formed with the unaccusative light verb AGR-*oq-* 'become'. Again, all these verbs take an absolutive argument. Below are some examples of complex verbs with a non-nominal predicative complement; in such instances, the light verb agrees with the absolutive subject:

(7) Gamač c'aq'tow guguru y-oq-xo.
stone.ABS.II completely round II-become-PRS
'The stone has become completely round.'
(8) Cadara-bi kunč'izi r-oq-xo.
star-PL.ABS.nIPL shine nIPL-become-PRS
'The stars are shining.'

In complex verbs with a predicative nominal, the referent of the logical subject appears in an oblique case, often in the genitive (9)-(12), in which case it is structurally a modifier of the absolutive argument, or in the lative (13)-(14):

(9) Žedu-s daʕba b-oq-si.
DEM.PL.I-GEN1 dispute.ABS.III III-become-PST.WIT
'They had a falling out.' (lit.: their dispute happened)

(10) Xex-za-s ɣalmaɣal r-oq-xo.
children-OS-GEN1 row.ABS.IV IV-become-PRS
'The children are arguing.' (lit.: the children's argument is happening)

(11) Elu-z ħalt'i-s gagat'u y-oq-no.
1PL-GEN2 work-GEN1 bottom.ABS.II II-become-PST.nWIT
'All our work was for nothing.' (lit.: our works' bottom occurred)

(12) Elu-s žaq r-oq-xo cez-ya-z mec-re-x-or
1PL-GEN1 habit.ABS.IV IV-become-PRS Tsez-OS-GEN2 language-OS-AD-LAT
cax-a.
write-INF
'We are getting used to writing in Tsez.' (lit.: our habit … becomes)

(13) Nesi-r zaħmat r-oq-si.
DEM.I-LAT hardship.ABS.IV IV-become-PST.WIT
'He had some difficulties.' (lit.: difficulties happened to him)

(14) Iškola-r zaral b-oq-si.
school-LAT losses.ABS.III III-become-PST.WIT
'The school had financial losses.' (lit.: losses happened to school)

2.2. Impersonal contexts

Impersonal constructions always have their understood argument in the absolutive. Abstract nouns in Tsez belong to gender IV, as do some other arguments reviewed in this section, so if a verb shows agreement in an impersonal construction, it is in gender IV.

It is common to find impersonal constructions with meteorological verbs, which are often taken cross-linguistically to be avalent. However, meteorological descriptions in Tsez allow for the introduction of the absolutive argument *ɣudi* 'day' (gender IV) or *hawa-baq'* 'weather (lit.: air-sun)' (gender IV), and if a meteorological predicate can manifest agreement, it registers agreement in gender IV regardless of the presence of an overt absolutive argument. Consider the following examples, where (15a) shows overt agreement and (15b) does not:

(15) a. *pro*/ɣudi r-oč'iw yoł.
day.ABS.IV IV-cold be.PRS
'It is cold.'

b. *pro*/ɣudi tatanu yoł.
day.ABS.IV warm be.PRS
'It is warm.'

Another typical impersonal context for avalent verbs is as predicates to clausal arguments. Such predicates, many of them adjectival, combine with a clausal argument expressed by an infinitival

phrase (16), a masdar (17), or a nominalization (18). All clausal arguments belong to gender IV, so again, if the verb registers agreement, it is in gender IV as well.[1]

(16) a. [Xabar teqr-a] r-oˁq'yu yoł.
news.ABS.III listen-INF IV-difficult/tiring be.PRS
'It is tiring to listen to the news.'
'To listen to the news is tiring.'

b. [Sapar b-od-a] ħoliw r-oq-xo.
travel.ABS.III III-do-INF free/easy IV-become-PRS
'It has become easy to travel.'
'Traveling has become easy.'

(17) [Q'ˁim-ä q'ˁim-e-s mec b-iy-r-ani-x]
one.REFL-OS-GEN1 language.ABS.III III-know-CAUS-MASD-AD.ESS
ħažetaw šebin (yoł).
important thing.ABS.IV be.PRS
'It is important to know one's own language.'

(18) [Nes-ä elu-q-or xabar es-a b-āy-xosi
DEM.I-ERG 1PL-POSS-LAT news.ABS.III tell-INF IV-must-PRS.PTCP
yäł-ru-łi] ʕažaibaw zow-s.
be.PRS-PST.PTCP-NMLZ surprising be.PST-PST.WIT
'That he was supposed to tell us the news was surprising.'
'It was surprising that he was supposed to tell us the news.'

However, it is unclear from a superficial investigation of the phrases in (16), (17), (18) whether the clausal complement is a genuine syntactic subject or whether there is a null pronominal in the subject position (this would be similar to English translations with the impersonal *it*). The word order in root clauses is quite free, so it does not allow us to draw definitive conclusions either, but the basic word order patterns suggest that clausal arguments are not true subjects. While there are no restrictions on inanimates in the ergative position (see section 3 below), clausal complements cannot appear in the transitive subject position. Consider the following contrast:

(19) a. Nesi-z xabar-y-ä mi ħayran y-oy-ä?
DEM.I-GEN2 news-OS-ERG 2SG.ABS.(II) surprised II-do-PST.WIT.INTERR
'Did his news surprise you?' (addressing a woman)

b. *[Eli b-āy-ru-łi]-z-ä mi ħayran
1PL.ABS.(IPL) IPL-come-PST.PTCP-NMLZ-OS-ERG 2SG.ABS.(II) surprised
y-oy-ä?
II-do-PST.WIT.INTERR
('Did it surprise you that we came?') (addressing a woman)

[1] Agreement inside the infinitival clause has no effect on the gender of the clausal complement—cf. (16b), where the infinitive agrees with the noun *sapar* in gender III. The entire infinitival complement is still gender IV. Agreement interaction across clauses is discussed in Ch. YY [LDA].

In no other contexts do we find a difference between clausal and non-clausal complements in Tsez, so a restriction against ergative (but not absolutive) clausal subjects would be unexpected.

2.3. Copular constructions

The Tsez copular verb is also used as an auxiliary in the formation of periphrastic tense forms. The paradigm of the copula is given in Ch. YY. The main forms are *yoł* [non-past] (marked as PRS in the glosses) and *zow*- [past]. Some copular clauses also use the verbs AGR-*oq*- 'become; be', AGR-*ič*- 'stay', and AGR-*oƛix*- 'rise, appear'. In this section, we will consider three main types of copular clauses: predicational, specificational, and identificational (Dixon 2010; Higgins 1979, Mikkelsen 2005; Partee 1986, a.o.). A number of other structures that also employ the verbs 'be', 'become' will be discussed in sections 2.4 and 2.5 below.

The subject of a copular clause, regardless of the finer clausal details, is always in the absolutive, and if the copula includes an agreeing complement, agreement occurs with the subject. For instance:

(20) Yedu muq b-ošäsi yoł.
DEM line.ABS.III III-curved be.PRS
'This line is curved.'

The omission of the copula in main clauses is pervasive, both in spontaneous speech and in narratives. Once a copular clause is embedded, the copula reappears.

In main clauses, predicational, specificational, and identificational copular constructions are identical. Consider the following predicational copular clauses,[2] in which the complement can be expressed by any category other than a finite verb: an adjective, a noun, a participial phrase, or a noun with a modifying numeral.

(21) Nāsin [raziyaw yoł/b-iči-x/b-oq-xo].
all.ABS.(IPL) content be.PRS/IPL-stay-PRS/IPL-become-PRS
'Everyone is happy.' (predicational)

(22) Mariyat žād [c'alduqan ānu].
Mariyat.ABS.II still student be.PRS.NEG
'Mariyat is not a student yet.'

(23) Eli [łˤono halmaɣ zow-s].
IPL.ABS three friend.ABS.I be-PST.WIT
'We were three friends.'

[2] Here and below we identify the predicate in square brackets.

In a specificational copular clause, the subject of the copular clause names a property and the complement of the copula identifies that property. Among other possibilities, the subject of a specificational copular clause can be expressed by a headless relative clause, as in (27).[3]

(24) Di-n [Ø-ay-äsi zow-s].[4]
1SG.ABS-TOP I-come-RES.PTCP AUX.PST-PST.WIT
'I am the one who arrived.'

(25) Nesi-ƛ' ci-gon [ʕUmarqilič-ƛin
DEM.I-SUPER.ESS name.ABS.III-CONTR.TOP Umarqilich-QUOT
zow-n/*b-ači-n/*b-oq-no].
be.PST-PST.nWIT/III-stay-PST.nWIT/IPL-become-PST.nWIT
'His name was Umarqilich.' (ʕAliqilič:3)

(26) Dow-ƛ'o ci [šow/šebi (yoł)/*b-oq-x-ä/
2SG-SUPER.ESS name.ABS.III what/what be.PRS/III-become-PRS-INTERR/
*b-oƛix-ä]?
III-appear-PRS-INTERR
'What is your name?' (lit.: the name on you…)

(27) Dä-r Ø-eti-xosi [dey halmaɣ
1SG-LAT I-like-PRS.PTCP 1SG.GEN friend.ABS.I
yoł/*Ø-oq-xo/*Ø-ači-x].
be.PRS/*I-become-PRS/*I-stay-PRS
'It's my friend that I really like.'

The subject of identificational copular clauses is usually a demonstrative. For example:

(28) Ža [debe-r dey wasiyat yoł/*b-oq-xo].
DEM 2SG-LAT 1SG.GEN1 will.ABS.III be.PRS/III-become-PRS
'This is my bequest (intended) for you.' (ʕAliqilič:81)

(29) Yedu [šebi ʕalamałi r-ič-a r-āy-x]?
DEM what wonder.ABS.IV IV-stay-INF IV-must-PRS
'What kind of wonder could this be?' (ʕAliqilič:125)

As these examples show, the use of all types of copular verbs is quite free in predicational clauses but is more restricted in the other two copular types, where in particular AGR-*oq*- is not accepted.

[3] Specificational copular clauses show two types of connectivity, in agreement and in reflexive binding. We discuss these phenomena in the respective chapters (CH. YY[AGR]. CH. YY[BIND]).

[4] The interpretation of this clause may follow either the copular clause structure shown here or a structure involving a complex verb form and the auxiliary 'be' (see CH. YY for verbal paradigm).

The word order in main clause copular constructions is extremely free. In particular, the complement of the clause can be separated from the copular verb, which means that there is room for ambiguity. For instance, the following orders are both possible:

(30) a. B-äži-ru kamanda nemcaw-za-s yoł.
IPL-lead-PST.PTCP team.ABS.IPL German-PL.OS-GEN1 be.PRS
'The winning team is German.' (specificational)
'The German (team) is the winning team.' (identificational)

b. Nemcaw-za-s b-äži-ru kamanda yoł.
German-PL.OS-GEN1 IPL-lead-PST.PTCP team.ABS.IPL be.PRS
'The winning team is German.' (specificational)
'The German (team) is the winning team.' (identificational)

Nevertheless, some generalizations emerge, in addition to the copula variation already noted. The overall preference is to have the copular subject precede the copular complement, which means that the preferred interpretation for (30a) is specificational, and for (30b), identificational. The subject can follow the copula, whereas the complement cannot. Consider the following examples (where, of course, the disambiguation crucially depends on the presence of an overt copula). In (31a), the predicate is preposed and the subject is *nemcawzas (kamanda).* In (31b), the subject is *bäžiru kamanda,* and the only interpretation available is that of a specificational copular clause. In (32a), we observe an identificational copular clause with a demonstrative as subject; as (32b) shows, the placement of the complement after *ānu* is ungrammatical.

(31) a. [B-äži-ru kamanda yoł] nemcaw-za-s (kamanda).
IPL-lead-PST.PTCP team.ABS.IPL be.PRS German-PL.OS-GEN1 team.ABS.IPL
'The German (team) is the winning team.' (identificational)

b. [Nemcaw-za-s yoł] b-äži-ru kamanda.
German-PL.OS-GEN1 be.PRS IPL-lead-PST.PTCP team.ABS.IPL
'The winning team is German.' (specificational)

(32) a. [Endiw dä-zo-q'aw ānu] žedu.
DEM 1SG-ATTR.OS-EQUAT be.PRS.NEG DEM.PL.ABS
'They are not like the one I have.' (Xanes łʿono užin, sis kidno:29)

b. *ānu endiw dä-zo-q'aw žedu.
be.PRS.NEG DEM 1SG-ATTR.OS-EQUAT DEM.PL.ABS

In questions formed on the basis of the copular clause, the interrogative marker attaches to the complement of the predicate, regardless of its placement in the clause. For instance:

(33) Debi-yä nece huinaw reƛ zow-n?
2SG.GEN1-INTERR so.much delicious meat.ABS.IV be.PST-PST.nWIT
'That so very delicious meat was yours?' (ʕAliqilič:161)

(34) a. Debi babiw-ä učitel (yoł)?
2SG.GEN1 father.ABS.I-INTERR teacher be.PRS
'Is the teacher your father?'
NOT: 'Is your father a teacher?'

b. Debi babiw učitel-ä (yoł)?
2SG.GEN1 father.ABS.I teacher-INTERR be.PRS
'Is your father a teacher?'
NOT: 'Is the teacher your father?'

In embedded copular clauses, the order subject >> complement >> copula is fixed. Thus, the sentences below are unambiguous:

(35) a. Debe-r r-uy-ä r-iy-x-änu [b-äži-ru
2SG-LAT IV-VAL-INTERR IV-know-PRS-NEG IPL-lead-PST.PTCP
kamanda nemcaw-za-s yäł-ru-łi]?
team.ABS.IPL German-PL.OS-GEN1 be.PRS-PST.PTCP-NMLZ
'You really don't know that the winners were the German team?'
b. Debe-r r-uy-ä r-iy-x-ānu [nemcaw-za-s
2SG-LAT IV-VAL-INTERR IV-know-PRS-NEG German-PL.OS-GEN1
b-äži-ru kamanda yäł-ru-łi]?
IPL-lead-PST.PTCP team.ABS.IPL be.PRS-PST.PTCP-NMLZ
'You really don't know that the German team was the winner?'

2.4. Existential verbs and existential clauses

Tsez does not have a separate verb meaning 'exist'; existential constructions have the verb 'be' as their predicate. Existential clauses and possessive clauses (section 2.5 below) are structured similarly. They necessarily include the verb of existence (which can be omitted in main clauses) and the absolutive pivot: the expression denoting the entity whose existence is under discussion.

Word order plays a crucial role in distinguishing existential constructions from locative constructions. The order of constituents in the main clause is generally quite free, and noun phrases can appear both before and after the verb (see CH. YY [Word order]). Despite this relatively free word order, the existential pivot must precede the verb of existence, preferably immediately adjacently. The locative and/or temporal expression serving as the scene-setter for the existential either appears to the left of the pivot, on the left periphery of the existential clause, or after the verb. For example, in (38), the scene-setting locative expression is *nełä ɣunoƛ' ƛ'iri* 'up on that tree', and the pivot is *ceyes xexoyabi teł yołäsi muži* 'a nest with eaglets in it'.

(36) Howži t'o r-od-a šebin ānu.
now here IV-do-INF thing.ABS.IV be.PRS.NEG
'There is nothing to do here now.' (ʕAliqilič:123)
(37) Nełä-q sidä pu-r-ƛ'-äz-a aluk'a-t'a,
DEM.nI-POSS.ESS one.OBL side-OS-SUPER-DIST-IN.ESS white-DISTR
sidä pu-rƛ'-äz-a c'uda-t'a heneš-ya-bi
one.OBL side-OS-SUPER-DIST-IN.ESS red-DISTR apple-OS-PL.ABS.nIPL
zow-n.
be.PST-PST.nWIT
'On one side it [the tree] had white apples, and on the other side red apples.' (Xanes łʕono užin, sis kidno:72)

(38) Nełä ɣun-o-ƛ’ ƛ’iri cey-e-s xexoy-a-bi
DEM.nI.OBL tree-OS-SUPER.ESS above eagle-OS-GEN1 youngling-OS-PL.ABS.nIPL
teł yoł-äsi muži zow-n.
inside be.PRS-RES nest.ABS.III be.PST-PST.nWIT
‘Up on that tree, there was a nest with eaglets in it.’ (ʕAliqilič:132)
EXISTENTIAL CONSTRUCTION

If the locative phrase and the pivot both precede the verb but appear in the order pivot >> locative, the sentence loses its existential interpretation and becomes a statement about the location of the nest, as in (39a). Similarly, if the absolutive noun phrase appears after the verb, it cannot be interpreted as an existential pivot (with one exception, which we will discuss below). The relevant example is (39b). See also Testelec (1997: 267) for similar discussion and examples from related languages.

(39) a. Cey-e-s xexoy-a-bi teł yoł-äsi
eagle-OS-GEN1 youngling-OS-PL.ABS.nIPL inside be.PRS-RES
muži nełä ɣun-o-ƛ’ ƛ’iri zow-n.
nest.ABS.III DEM.nI.OBL tree-OS-SUPER.ESS above be.PST-PST.nWIT
‘A/the nest with eaglets in it was up on that tree.’ LOCATIVE CONSTRUCTION
b. Nełä ɣun-o-ƛ’ ƛ’iri zow-n
DEM.nI.OBL tree-OS-SUPER.ESS above be.PST-PST.nWIT
cey-e-s xexoy-a-bi teł yoł-äsi muži.
eagle-OS-GEN1 youngling-OS-PL.ABS.nIPL inside be.PRS-RES nest.ABS.III
‘The nest with eaglets in it was up on that tree.’[5] LOCATIVE CONSTRUCTION

In (40a), we find an existential construction with the scene-setting expression in the postverbal position. If the pivot in (40a), appears postverbally, the sentence becomes a (non-existential) statement about the location of a widow (regardless of the position of the locative) (40b-d):

(40) a. Sis q’orolay zow-n nełä ɣˢutk-ä teł.
one widow.ABS.II be.PST-PST.nWIT DEM.nI.OBL house-IN.ESS inside
‘There was a widow inside that house.’ EXISTENTIAL CONSTRUCTION
b. Zow-n sis q’orolay nełä ɣˢutk-ä teł.
be.PST-PST.nWIT one widow.ABS.II DEM.nI.OBL house-IN.ESS inside
‘One widow was inside that house.’ LOCATIVE CONSTRUCTION
c. Zow-n nełä ɣˢutk-ä teł sis q’orolay.
be.PST-PST.nWIT DEM.nI.OBL house-IN.ESS inside one widow.ABS.II
‘One widow was inside that house.’ LOCATIVE CONSTRUCTION
d. Nełä ɣˢutk-ä teł zow-n sis q’orolay.
DEM.nI.OBL house-IN.ESS inside be.PST-PST.nWIT one widow.ABS.II
‘One widow was inside that house.’ LOCATIVE CONSTRUCTION

[5] Postverbal subjects are typically interpreted as definite or specific, as discussed in CH. YY [INF STR].

Tsez does not have determiners, so the expression of (in)definiteness is achieved via a combination of word order, topic marking, and contextual factors. In the existential construction, the pivot cannot appear with the topic markers *–n(o)* and *–gon* (see CH. YY [Particles]). If *–n(o)* is used with the pivot, it can only be interpreted as the linking particle. For example:

(41) Nełä ɣˢutk-ä teł sis q'orolay-n
DEM.nI.OBL house-IN.ESS inside one widow.ABS.II-and
neła-s kid-no zow-n.
DEM.nI.OBL-GEN1 girl.ABS.II-and be.PST-PST.nWIT
'Inside that house there was a widow and her daughter.' (ʕAliqilič:32)

If the constituent that precedes the existential predicate combines with the contrastive topic marker *–gon,* the sentence cannot be interpreted as existential:

(42) Nełä ɣˢutk-ä teł sis q'orolay-gon
DEM.nI.OBL house-IN.ESS inside one widow.ABS.II-CONTR.TOP
zow-n.
be.PST-PST.nWIT
'As for a widow, she was inside that house.'
NOT: 'Inside that house there was a WIDOW.'

Normally the order of constituents in the existential construction is *scene-setting expression—existential pivot—existential verb*, as shown in several examples above. A regular deviation from that order is observed in story openings, where the first element is the predicate, followed by the pivot. For example:[6]

(43) Zow-n-ƛax zow-n-č'ey-ƛax bˢeƛo-n,
BE.PST-PST.nWIT-QUOT be.PST-PST.nWIT-NEG-QUOT pig.ABS.III-and
boc'i-n, ziru-n, qˢay-no.
wolf.ABS.III-and fox.ABS.III-and hare.ABS.III-and
'Once upon a time, there lived a pig, a wolf, a fox, and a hare.' (K'et'us hunar:1)

Note that this story-opener does not include a scene-setting expression, so the order existential predicate >> pivot may serve to differentiate this construction from a categorical structure such as the one shown in (39). With the exception of story-openers, existential pivots cannot follow the existential predicate. Meanwhile, as examples (39) and (42) show, intransitive subjects outside existentials have more placement options.

Another point of difference between intransitive subjects (including subjects of unergatives) and existential pivots is that intransitive subjects can bind reflexives in their own clause, while pivots cannot. Consider the following sentence, which can only be a statement about the devil's location, but not an existential statement (the corresponding English existential is equally unacceptable).

[6] See also Ch. YY [ADvP] for a discussion of this construction.

(44) Nełä neło-z ciq-qo šayt'an
REFL. nI-GEN2 forest-POSS.ESS devil.ABS.III
zow-n/b-ići-n.
be.PST-PST.nWIT/III-stay-PST.nWIT
'A/The devil$_i$ was in his$_i$ forest.'
NOT: 'There was a devil$_i$ in his$_i$ forest.'

In sum, we find structural evidence in support of the distinction between absolutive subjects in non-existential intransitive clauses and existential pivots. As we show in the next section, there is a strong similarity between existential pivots and nouns denoting possessa in possessive clauses; both types of clauses include existential predicates.

2.5. Intransitive verbs in possessive clauses

Tsez does not have a transitive verb with the meaning 'have', and possession is expressed by a particular subtype of the existential clause, which features the verb 'be' (*yoł* in the present and *zow*- in the past), the inchoative 'become' (AGR-*oq*-), or more rarely such verbs as 'appear' or 'arrive'. All these verbs take the absolutive argument denoting the possessum as their subject, and the denotation of the possessor appears in genitive 1 (GEN1) for permanent possession and poss-essive (POSS.ESS) for temporary possession. There is no distinction between alienable and inalienable possession in Tsez.

Similarities between non-possessive existential constructions and possessive constructions are therefore due to the shared predicate meaning 'be'. The two constructions also have similar word order properties, with the absolutive noun phrase appearing immediately before the verb in both. In the existential construction, the scene-setting expression appears in one of the spatial forms or is expressed by an adverbial phrase; the external possessor in the possessive construction has more restricted encoding criteria. The genitive of the external possessor typically appears either on the left edge of the clause, as in examples (45)-(48), or on the right, as in example (50). While other placements are less acceptable, they are not impossible, as (51) shows; in that example, a heavy constituent (*mi elo ƛ'irir iziranix*) modifying the absolutive precedes the genitive of external possession.

Some examples:

(45) Nesi-s rok'-ƛ'o-si šebin r-oq-no.
DEM.1-GEN1 heart-SUPR.ESS-ATTR thing.ABS.IV IV-become-PST.nWIT
'He had a wish.' (lit.: a thing existing on heart)

(46) Sidä eniw-s r-od-a-r-is-a šebin
one.OBL mother-GEN1 IV-do-INF-IV-take-INF thing.ABS.IV
koƛ'i-x-ānu-si kid zow-n.
learn-PRS-NEG-ATTR girl.ABS.II be.PST-PST.nWIT
'One mother had a daughter who had no idea how to do a thing.' (Eniwn kidno:1)

(47) ʕoloq-za-s zigara b-oƛi-x.
young person-PL.OS-GEN1 complaint.ABS.III III-appear-PRS

'The young people have a complaint.' (Ražbadinno, Tawadin:13)

(48) Neł šahar-y-ä teł sid xan-e-s kid
DEM.nI.OBL city-OS-IN.ESS inside one.OBL king-OS-GEN1 girl.ABS.II
zow-n.
be.PST-PST.nWIT
'In that city, a king had a daughter.' (Xanes łʿono užin, sis kidno:7)

If the genitive-absolutive order is reversed, the sentence loses its possessive interpretation and has the meaning of a specificational copular clause (see also ex. (34) above).

(49) Mašina murad-e-s zow-s.
car.ABS.III Murad-OS-GEN1 be.PST-PST.WIT
'The car was Murad's.'
NOT: 'Murad had a car.'

As the following examples indicate, the same genitive-absolutive alignment is observed under negation as well:

(50) T'o r-od-a šebin ānu xex-za-s.
here IV-do-INF thing.ABS.IV be.PRS.NEG child-OS-GEN1
'Children have nothing to do here.'
(51) Mi elo ƛ'iri-r Ø-izi-r-ani-x elu-s
2SG.ABS.(I) there above-LAT I-rise-CAUS-MASD-AD.ESS 1PL-GEN1
res-no maħal-no ānu.
possibility.ABS.III-and might.ABS.III-and be.NEG
'We have no ability or might to lift you up there.' (ʕAliqilič:113)
(52) Dey eƛ'i at'ono-ƛ' otpuska ānu.
1SG.GEN1 past summer-SUPER.ESS vacation.ABS.III be.PRS.NEG
'I did not have a vacation last summer.'

As mentioned earlier (Ch. YY[Case system]), Tsez grammar encodes a contrast between permanent and temporary possession. In possessive intransitive clauses, the use of the genitive indicates permanent possession and the use of the poss-essive indicates temporary possession. Compare the following examples:

(53) Murad-e-s mašina zow-ä?
Murad-OS-GEN1 car.ABS.III be.PST-INTERR
'Did Murad have (own) a car?'
(54) Murad-qo mašina zow-ä?
Murad-POSS.ESS car.ABS.III be.PST-INTERR
'Did Murad have a car (for temporary use)?'

The difference between the possessor genitive in the possessive constructions and the genitive accompanying the predicative nominal in complex verbs (as in examples (9), (10), (11), (12) above) is more nuanced. Absolutive noun phrases in Tsez can be discontinuous (see CH. YY

[Noun phrase]), so the separation of the genitive and the noun it modifies is to be expected. Following this logic, we could potentially analyze possessive constructions the same way: the genitive modifies the pivot, and possessive clauses are simply existentials that lack a scene-setting expression. Then a sentence like (48), with irrelevant details omitted, would literally mean, "His daughter existed." Thus:

(55) [Nesi-s kid] zow-s.
DEM.I-GEN1 girl.ABS.II be.PST-PST.WIT
PIVOT EXISTENTIAL PREDICATE
'He had a daughter.'

Two considerations suggest that this analysis is incorrect. First, discontinuous noun phrases are subject to the restriction that the modifier cannot follow the head noun (see Ch. YY [Noun phrase]). In possessive sentences, however, the possessor can easily appear after the verb—see example (50) above. Second, the possessor genitive in possessive constructions can bind the absolutive complement, whereas the possessor genitive inside a noun phrase cannot:[7]

(56) Yiła k'et'u-s nełä neło-s bet'erhan yoł-ä?
DEM.nI cat-GEN1 REFL.nI-GEN1 master.ABS.I be.PRS-INTERR
'Does this cat have an owner?'

(57) *[Madina-s nełä neło-s q'as] t'ubazi b-oq-si.
Madina-GEN1 REFL.nI-GEN1 wish.ABS.III fulfill III-become-PST.WIT
(Madina's own wish became true.')

Based on these considerations, we suggest that the genitive in possessive sentences is a separate constituent from the existential genitive modifier, and it maps onto the highest argument in the possessive clause. The example (48) above will thus have the following structure:

(58) [nesi-s] [kid] zow-s.
DEM.1-GEN1 girl.ABS.II be.PST-PST.WIT
HIGHEST ARGUMENT PIVOT EXISTENTIAL PREDICATE
'He had a daughter.'

The genitive is therefore similar to the scene-setting expressions we observe in genuine existential sentences (see section 2.4 above). As a genitive of the external possessor functioning at the clause level, the possessive genitive contrasts with the adnominal genitive (see König and Haspelmath 1998; Lander 2008; Payne and Barshi 1999; Vergnaud and Zubizarreta 1992, a.o.

[7] As with existentials proper, the possessum cannot antecede its own reflexive in the possessor phrase:

(i) *Nesä nesi-z k'et'u-s bet'erhan yoł.
REFL.I-GEN2 cat-GEN1 master.ABS.I be.PRS
('The cat's owner exists.')

for the distinction between external possessors and adnominal possessors). The use of genitive to express the external possessor is quite common in the Nakh-Dagestanian family; for example, it is observed in Archi (Kibrik 1977), as well Tsez's immediate family group: Avar (Alekseev and Ataev 1997: 46), Hunzib (van den Berg 1995: 42ff.), Khwarshi (Khalilova 2009: 70), and Hinuq (Forker 2013: 534, 555).

2.6. The accidental construction

In the accidental construction, the predicate (usually denoting a state) is intransitive, but the clause can include a poss-essive adjunct referring to the inadvertent agent. Intransitive verbs that participate in this construction are unaccusative.

(59) a. Aki r-exu-s.
window.ABS.IV IV-break.ITR-PST.WIT
'The window broke.'

b. Eniw-q aki r-exu-s.
mother-POSS.ESS window.ABS.IV IV-break.ITR-PST.WIT
'Mother accidentally broke the window.' ("The window broke on mother.")

(60) a. Uži bet'u-k'oƛanay-x.
boy.ABS.I jump-PRS
'The boy is jumping.'

b. *Eniw-q uži bet'u-k'oƛanay-x.
mother-POSS.ESS boy.ABS.I jump-PRS
("The boy is jumping on mother's watch.")

The state of affairs denoted by the accidental construction is perceived as something that was unintended by the agent (see Kittilä 2007a for an overview and discussion of cross-linguistic distribution). For instance, in (59b), the continuation 'but she wanted it that way' is infelicitous, as indicated in the example below:

(61) Eniw-q aki r-exu-s
mother-POSS.ESS window.ABS.IV IV-break.ITR-PST.WIT
(#amma howži neło-s murad b-oy-s).
but that DEM.n1-GEN goal.ABS.III III-do-PST.WIT
'Mother accidentally broke the window (#but that was her goal).'

The transitive equivalent of (59b), involving a volitional agent, has the predicate AGR-*exur*- 'break (tr.)' (*exu-r*- 'break.ITR-CAUS'). In that construction, the continuation indicating the agent's intent is felicitous:

(62) Eni-y-ä aki r-exu-r-si
mother-ERG window.ABS.IV IV-break-CAUS-PST.WIT
(amma howži neło-s murad b-oy-s).
but that DEM.n1-GEN goal.ABS.III III-do-PST.WIT
'Mother broke the window (but that was her goal).'

The word order in the accidental construction is not rigid; however, we note a strong preference for placing the noun phrase expressing the inadvertent agent at the left or right periphery of the clause; orders such as (63a) are judged awkward:

(63) a. #Tor besuroqu-za-q ɣanq'izi r-oq-si.
net.ABS.IV fisherman-PL.OS-POSS.ESS drown IV-become-PST.WIT

b. Besuroqu-za-q tor ɣanq'izi r-oq-si.
fisherman-PL.OS-POSS.ESS net.ABS.IV drown IV-become-PST.WIT

c. Tor ɣanq'izi r-oq-si besuroqu-za-q.
boat.ABS.IV drown IV-become-PST.WIT fisherman-PL.OS-POSS.ESS
'The net sank on the fishermen.'

The accidental construction is not the only one where the agentive participant appears in the poss-essive form. It may be possible to find a general meaning component for poss-essive noun phrases denoting participants with incomplete agency, but even if so, it is still important to differentiate several constructions involving the poss-essive agent, including the accidental construction and the potential construction discussed in section 3.2 below.

2.7. Intransitive symmetrical predicates

Symmetrical predicates such as 'collide', 'marry', and 'meet' entail that the main participant in an event is a plurality of individuals. Tsez has two ways of expressing such a plurality: either the subject is expressed in the plural (or by a coordinate noun phrase; see Ch. YY [Noun phrase]) or the subject is expressed in the singular accompanied by a subcategorized adjunct in an oblique form. Consider both options for the verbs meaning 'mix':

(64) a. Q'ˤano huni-bi łic'ox-xo.
two road-PL.ABS.nIPL mix-PRS
'The two roads intersect.'

b. Łāłaru-ni huni cibaru huni-ł łic'ox-xo.
narrow-DEF road.ABS.IV old road-CONT.ESS mix-PRS
'The narrow road intersects with the old road.'

(65) a. Isi-n qema-n łic'ox-si.
snow.ABS.II-and rain.ABS.IV-and mix-PST.WIT
'Snow and rain mixed.'

b. Isi qema-ł łic'ox-si.
snow.ABS.II rain-CONT.ESS mix-PST.WIT
'The snow mixed with the rain.'

(66) a. Nuci-n ɣˤay-n r-ig łek'i-x.
honey.ABS.IV-and milk.ABS.II-and nIPL-well mix-PRS
'Honey and milk mix well.'

b. Nuci ɣˤay-ł łek'i-s.
honey.ABS.IV milk-CONT.ESS mix-PST.WIT
'The honey mixed with the milk.' (lit.: in milk)

The verb ‘collide’ takes the absolutive subject and an adjunct in the cont-essive (for animates) and poss-essive (for inanimates, even the ones that are mobile):[8]

(67) a. Irbahin-no halmaɣ-no č’ayi-s.
Ibrahim.ABS.I-and friend-ABS.I-and collide-PST.WIT
‘Ibrahim and his friend collided.’ (~quarrelled)

b. Irbahin halmaɣ-e-ł č’ayi-s.
Ibrahim.ABS.I friend-OS-CONT.ESS collide-PST.WIT
‘Ibrahim collided with a friend.’ (~quarrelled)

(68) a. K’onk’a-n mašina-n č’ayi-s.
bicycle.ABS.III-and car-ABS.III-and collide-PST.WIT
‘A bicycle and a car collided.’
K’onk’a mašina-q č’ayi-s.
bicycle.ABS.III car-POSS.ESS collide-PST.WIT
‘A bicycle collided with a car.’

The compound verb ‘meet’ can take an absolutive subject and an adjunct in the apud-essive:

(69) a. Halmaɣ-bi k^{w}eze b-oq-si.
friend-PL.ABS.IPL meet IPL-become-PST.WIT
‘The friends met.’

b. Žedu halmaɣ-za-de k^{w}eze b-oq-si.
DEM.PL.ABS.(IPL) friend-PL.OS-APUD.ESS meet IPL-become-PST.WIT
‘They met with friends.’

The verb AGR-*iħanad*- ‘fight’ can take a plural absolutive subject or a subject with an adjunct in the apud-lative:

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[8] If one of the participants is animate and the other inanimate, the construction with an adjunct is strongly preferred over the construction with a coordinate DP. Thus:

(i) a. Irbahin k’onk’a-q č’ayi-s.
Ibrahim.ABS.I bicycle-POSS.ESS collide-PST.WIT
‘Ibrahim collided with a bicycle.’

b. #Irbahin-no k’onk’a-n č’ayi-s.
Ibrahim.ABS.I-and bicycle-ABS.III-and collide-PST.WIT
(‘Ibrahim and a bicycle collided.’)

(ii) a. K’onk’a k’et’u-ł č’ayi-s.
bicycle-ABS.III cat-CONT.ESS collide-PST.WIT
‘A/the bicycle collided with a/the cat.’

b. #K’onk’a-n k’et’u-n č’ayi-s.
bicycle-ABS.III-and cat-ABS.III-and collide-PST.WIT
(‘A/the bicycle and a/the cat collided.’)

(70) a. Žedu b-iħanay-s.
DEM.PL.ABS.(IPL) IPL-fight-PST.WIT
'They fought (against) each other.'

b. Žedu tušman-za-de-r b-iħanay-s.
DEM.PL.ABS.(IPL) enemy-PL.OS-APUD-LAT IPL-fight-PST.WIT
'They fought (against) the enemy.'

The verb AGR-*ik'*- 'go' used in the meaning 'marry' (only about a woman) combines with the ad-essive adjunct and does not allow a coordinate structure subject:[9]

(71) Dey kid maħama-z ʕAli-x y-ik'i-x.
1SG.GEN daughter.ABS.II Mohammed-GEN2 Ali-AD.ESS II-go-PRS
'My daughter is going to marry Ali Magomedov.'

2.8. An idiomatic expression with an intransitive subject

Subject idioms are generally less common than idiomatic expressions with objects, and we would like to mention several of them here. We have been able to observe at least one idiomatic expression with the absolutive subject:

(72) Ziru ƛuƛi-x.
fox.ABS.III give.birth-PRS
'It is a sun shower (clear-sky hail).' (lit.: fox is giving birth)[10]

See also section 3.1.3 for idiomatic expressions with ergative noun phrases.

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[9] The meaning of 'marry' for males is expressed by a transitive predicate *baru y-ow*- 'wife II-bring'; the name of the bride can appear in place of *baru* 'wife' thus:

(i) a. ʕAl-ä zarema y-ow-si.
Ali-ERG Zarema.ABS.II II-bring-PST.WIT
'Ali married Zarema.'

b. ʕAl-ä baru y-ow-si.
Ali-ERG wife.ABS.II II-bring-PST.WIT
'Ali got married.'

[10] There must be some mythological connection between sun-showers and foxes, because a number of languages (including some southwestern English dialects) refer to sun-showers as "a fox's wedding" or "a fox giving birth". See http://linguistlist.org/issues/9/9-1795.html for a collection of data and further references.

3. Transitive verbs

Verbs with two or more arguments form two main constructions: the ergative construction and the potential construction. Since there is no difference between transitive and ditransitive constructions with respect to the encoding of the agent and patient, we will discuss the encoding of those argument in this section, and in section 4, we will concentrate on the encoding of the third argument of ditransitives.

3.1. Ergative construction

3.1.1. Simple verbal predicates

The basic construction for two-place non-affective predicates is the ergative construction, in which the subject argument appears in the ergative, the object argument is in the absolutive, and the agreement, if visible, is with the absolutive argument.

(73) Zir-ä k'et'u nełä neło-de sadaq idu-ɣor
fox-ERG cat.ABS.III REFL.nI-APUD.ESS together home-VERS
b-iži-n.
III-lead-PST.nWIT
'The fox$_i$ took the cat with him$_i$ to his$_i$ home.' (based on K'et'un zirun:9)

A large number of transitive verbs that are causativized from intransitives take ergative and absolutive arguments. For example, the intransitive verb *quq-* 'be dry; dry up (intr.)' turns into a transitive with the addition of the causative suffix:

(74) a. Moči beq-ā-r quqi-x.
field.ABS.III sun-IN-LAT dry-PRS
'The ground dries up in the sun.'
b. Beq-ä moči quq-ir-xo.
sun-ERG soil.ABS.III dry-CAUS-PRS
'The sun dries up the ground.'

This last example and the examples below show that the ergative-absolutive construction can be used with inanimate agents:

(75) Łał-ä as r-iqir-si.
wind-ERG sky.ABS.IV IV-catch-PST.WIT
'The wind fogged up (lit.: caught) the sky.'
(76) C'i-d-ä ʕaˤɣur y-iku-r-si.
fire-ERG mill.ABS.II II-burn.INTR-CAUS-PST.WIT
'Fire burnt the mill.'
(77) ħukumat-y-ä xalq'i b-aƛ'ir-xo.
government-OS-ERG people.ABS.IPL IPL-deceive-PRS
'The government deceives/is deceiving people.'
(78) Heneš-yo-z ɣun-ä gagali b-oɣ-no.
apple-OS-GEN2 tree-ERG flower.ABS.III III-pull-PST.nWIT

'The apple tree blossomed.' (lit.: pulled flower)

(79) Xirix-y-ä qaca r-eč'-xo.
saw-OS-ERG firewood.ABS.IV IV-cut-PRS
'A/the saw saws firewood.'

(80) Yiła rek-ä ħišimuku r-aˁɣi-x.
DEM key-ERG lock.ABS.IV IV-open-PRS
'This key opens the lock.'

(81) Šud-ä taraw žek'u-s ʕamal b-it'zi b-äd-inč'i.
grave-ERG except man-GEN1 character.ABS.III III-straight III-do.FUT-NEG
'You can't teach an old dog new tricks.' (lit.: Nothing except the grave will straighten out the man's nature/character)

We did not find restrictions on the use of inanimates in the ergative. However, there are some word order differences worth noting. While animate unergatives can appear anywhere in the clause (with the preferred positions being at the left edge, SOV, and after the verb, XOVS), some inanimate unergatives are judged most natural when they follow rather than precede the object. Compare (75)-(81) above, in which the inanimate ergative preceded the object, with the following naturally occurring examples:

(82) Ziru łar-ä b-is-no.
fox.ABS.III belly-ERG III-take-PST.nWIT
'The fox had a bad stomach ache.' (lit.: the stomach took the fox)

(83) ƛirba k'ic-ä Ø−is-xo.
guest.ABS.(I) tooth-ERG I-take-PRS
'The guest has a bad toothache.' (lit.: the tooth takes the guest)

(84) Eniw q'ˁim-ä y-iži=y-oɣ-xo.
mother.ABS.II head-ERG II-carry=II-pull-PRS
'Mother has a headache.' (lit.: the head carries-pulls Mother)

In these instances, typically representing situations of discomfort, the ergative noun phrase expresses the cause for discomfort and the absolutive is the patient. Note that the verb is clearly transitive, and agrees with the absolutive argument. The ergative can precede the object, although this order is judged less natural:

(85) #K'ic-ä ƛirba Ø−is-xo.
tooth-ERG guest.ABS.(I) I-take-PRS
'The guest has a bad toothache.' (lit.: the tooth takes the guest)

Judgements become sharper if the ergative noun phrase follows the verb. In contrast to other clauses with ergative noun phrases, postverbal ergatives for these expressions are considered unacceptable. Compare the acceptable (86) (based on (75)) and the unacceptable (87), based on (82):

(86) As r-iqir-si łał-ä.
sky.ABS.IV IV-catch-PST.WIT wind-ERG
'The wind fogged up the sky.'

(87) #Ziru b-is-no łar-ä.
fox.ABS.III III-take-PST.nWIT belly-ERG
('The fox had a bad stomach ache.')

It is possible that these word order differences have something to do with animacy, but consider the following example where the ergative is again inanimate, and the absolutive object denotes a human:

(88) a. Zaman-ä yedu žek'u Ø-is-no.
time-ERG DEM man.ABS.I I-take-PST.nWIT
b. Yedu žek'u Ø-is-no zaman-ä.
DEM man.ABS.I I-take-PST.nWIT time- ERG
'Time took away this man.'

In another special use of the ergative-absolutive construction with an inanimate ergative, the same noun appears in both cases, with the absolutive preceding the ergative; such sentences are interpreted as representing internally-caused events. Their predicates are clearly transitive, as indicated by the ergative argument and, sometimes, the presence of causative marking on the verb. This construction is not very productive.

(89) C'i c'i-d-ä r-iku-r-xo.
fire.ABS.IV fire-OS-ERG IV-burn-CAUS-PRS
'Fire burns.'
(90) Hek'u hek'-ä b-aħi-r-xo.
potato.ABS.III potato-ERG III-boil-CAUS-PRS
'The potatoes are boiling.'

Since the ergative and in-essive forms of most Tsez nouns are identical, one could imagine that the transitive with the internal-causation reading takes a null ergative pronoun, and the form glossed as ergative is actually in-essive. Thus, (89) could be hypothetically represented as (91), with the null pronominal ergative:

(91) *pro* c'i c'i-d-ä r-iku-r-xo.
fire.ABS.IV fire-OS-IN.ESS IV-burn-CAUS-PRS
'Fire burns.'

At least two considerations argue against such a representation. First, there are some nouns, a subset of nominals with the oblique stem in *–o*, that have a zero ending in the ergative (see CH. YY [Case morphology]). Such ergatives, which differ in form from the in-essive, occur in the construction discussed here, indicating strongly that the second noun is indeed ergative, not in-essive:

(92) Nur nur-ä/nur-mo-Ø qašik'-er-xo.
light.ABS.III light-ERG/light-OS-ERG shine-CAUSE-PRS
'The light is shining.'
(93) Čuret' čuret'-y-ä/čuret'-yo-Ø bok'-xo.

whip.ABS.III whip-OS-ERG/whip-OS-ERG hit-PRS
'The whip hits.'

Second, it is normally possible to replace a null pronoun with an overt noun phrase without a change in meaning. No such replacement is available in (89). Compare (89) with the example below, where the hypothetical null pronoun is replaced with an overt ergative noun phrase; the sentence no longer has the interpretation of an internally caused event:

(94) Šayt'an-z-ä c'i c'i-d-ä r-iku-r-xo.
devil-OS-ERG fire.ABS.IV fire-OS-IN.ESS IV-burn-CAUS-PRS
'Devil is burning fire inside the fire.'

A common use of the internally-caused ergative construction is found with the word 'rain'. While the intransitive verb AGR-ay 'come' can be used to express the event of rain falling (95), we also found the (di)transitive verb AGR-*egir*- 'send' used without a subject in this context (96a). The alternative, with the ergative noun phrase 'rain' present, is considered possible but redundant and therefore awkward (96b).

(95) Qema r-ay-x.
rain.ABS.IV IV-come-PRS
'It is raining.'

(96) a. Qema r-egir-xo.
rain.ABS.IV IV-send-PRS
'It is raining.'

b. #Qema qem-ä r-egir-xo.
rain.ABS.IV rain-ERG IV-send-PRS
'It is raining.'

Generic transitive constructions with an arbitrary animate subject often express that subject with a null pronominal. This use is quite common in proverbs and set expressions; consider the following example:

(97) *pro*$_{arb}$ q'ˤim-zo oz-ä-si ƛexu y-ukay-x-ānu
self-GEN2 eye-IN.ESS-ATTR log.ABS.II II-see-PRES-NEG
žek'u-z oz-ä-si mus b-ukay-x.
man-GEN2 eye-IN.ESS-ATTR hair.ABS.III III-see-PRES
'Why worry about a speck in your friend's eye when you have a log in your own?' (lit.: one does not notice a log in his own eye but sees a tiny hair in another's eye)

Several properties of the ergative's syntactic distribution distinguish it from the absolutive object and identify its higher position in the syntactic structure compared to the object. In the ergative construction, the ergative noun phrase can antecede a reflexive in the absolutive position, but not the other way around (see CH. YY [Reflexives and anaphora]). Additionally, the ergative, but not the absolutive, forms a dependency with the subject or object of the higher clause in embedded infinitival and masdar clauses (thus participating in subject/object control), see CH. YY [Complement clauses]. Finally, the ergative and absolutive noun phrases differ with respect

to the formation of masdar relative clauses (CH. YY [Relative clauses]). Independent evidence shows that masdar relative clauses can relativize on any argument except the highest one (the subject); for instance, absolutive subjects cannot relativize in masdar relative clauses. All these properties identify the ergative noun phrase as subject and the absolutive noun phrase as object.

3.1.2. Complex transitive predicates

A great number of transitive predicates are complex, consisting of the light verb AGR-*od*- 'do; make' and a preverbal component. Such verbs are the transitive counterparts of intransitive light verb constructions with *–oq-*. Two patterns of agreement are observed in transitive light verb constructions (see CH. YY [PredP] for a detailed discussion). If a complex verb includes a non-nominal predicative complement, the light verb agrees with the absolutive argument outside the complex predicate. For example, *žažaru* AGR-*od* -'thin out' agrees with *bix* in (98), and *garzi* AGR-*od* -'ask for, request' agrees with *ʕaq'lu* and then with *posu* in (99).

(98) Nes-ä bix žažaru r-oy-s.
DEM.I-ERG grass.ABS.IV thin IV-do-PST.WIT
'He thinned the grass.'

(99) ʕaq'lu garzi b-od-o, posu garzi
advice.ABS.III request III-do-IMPER wealth.ABS.III request
b-ädi-n.
III-do-PROH
'Ask for wisdom, not for riches.' (lit.: request advice, do not request riches)

Many other complex verbs are represented by a combination of a noun in the absolutive and AGR-*od*-, 'do, make', where that noun serves as the absolutive object of the clause and the light verb agrees with it. A good number of nouns co-occurring with light verbs are part of the Tsez nominal lexicon (including earlier borrowings). The noun takes the place of the absolutive object, and the participant that corresponds to the notional patient of the event is then expressed either as an adnominal genitive (as in (100)) or as a noun phrase in a spatial form:

(100) B-ʕeɣa-t'a-ni-z-ä b-ʕeže-t'a-ni-za-s ħurmat
IPL-young-DISTR-DEF-PL.OS-ERG IPL-old-DISTR-DEF-PL.OS-GEN1 respect.ABS.III
b-oy-x.
III-do-PRS
'The young respect the old.' (*ħurmat bod-* 'respect')

(101) Kid-b-ä eniw-q/eniw-r kumak b-oy-x.
girl-OS-ERG mother-POSS.ESS/mother-LAT help.ABS.III III-do-PRS
'The girl helps mother.' (*kumak bod-* 'help')

(102) Aždaħ-ä nesi-z k'onč'-a-ƛ' raq r-oy-s.
dragon-ERG DEM.I-GEN2 leg-OS-SUPER.ESS wound.ABS.IV IV-do-PST.WIT
'The dragon wounded him in the leg.' (*raq rod-* 'wound')

(103) Nes-ä mežu-r gap y-oy-x.
DEM.I-ERG 2PL-LAT joke.ABS.II II-do-PRS
'He is joking with you.' (*gap yod-* 'joke')

Example (104) shows the use of the ergative construction for expressing the notion of occupation: the light verb combines with the abstract nominal derived from the profession/occupation title:

(104) ħaž-ä šopir-łi r-oy-x.
Hadji-ERG driver-NMLZ.ABS.IV IV-do-PRS
'Hadji works as a driver.' ("does driverhood")

The use of light verbs for complex-verb derivation is very productive. Some of the nouns occurring with AGR–*od*- are new borrowings, mostly from Russian—and they are not always nouns in the source language. For example, in (105), the two recent Russian borrowings are indeed nouns, but in (106), the borrowing *mišayat* comes from a verb (either third-person singular or, less likely, infinitive), yet the light verb agrees with *mišayat* in gender III as if it were a noun.[11]

(105) Ħakim-ä ɣude sabranya b-od-a
boss-ERG tomorrow meeting.ABS.III III-do-INF
palan b-oy-s.
plan.ABS.III III-do-PST.WIT
'The boss planned to have a meeting tomorrow.'
(106) Mež-ä dä-r mišayat b-oy-x.
2PL-ERG 1SG-LAT interference.ABS.III III-do-PRS
'You are in my way.' (lit.: you are doing bothering to me)

All the complex transitive verbs shown above take the absolutive and ergative, but the other arguments presupposed by their argument structure have to be expressed in oblique cases, as shown.

3.1.3. Idiomatic expressions with the ergative subject

Finally, we would like to mention several idioms that take an ergative subject. Subject idioms with transitive verbs are generally quite rare; in English, just a couple such subject idioms, such as (*Has the) cat got your tongue?,* compete with a plethora of object idioms. Tsez exhibits the same misbalance, with multiple object idioms and, as far as we have seen, just a couple of idiomatic expressions with the ergative subject. The first one has to do with astronomical eclipses; it can appear with two different interchangeable verbs ('eat' and 'catch'):

(107) a. T'ont'oħ-ä/t'unt'uħ-ä buq' b-ac'-xo.
darkness-ERG sun.ABS.III III-eat.TR-PRS
'There is a solar eclipse.' (lit.: darkness eats the sun)
b. T'ont'oħ-ä/t'unt'uħ-ä buc b-iqir-no.
darkness-ERG moon.ABS.III III-catch-PST.nWIT

[11] One could argue that the infinitive is a nominal form; however, Avar infinitives in *–ze/-zi* do not have nominal properties when they occur in constructions with a light verb. The infinitival status of these forms in Avar is therefore irrelevant.

'There was a lunar eclipse.' (lit.: darkness caught the moon)

Another idiomatic expression is as follows:

(108) Žek'u-z k'et'-ä aw b-iqār-inč'i.
person-GEN2 cat-ERG mouse.ABS.III III-catch.FUT-NEG
'Your neighbor's cat won't catch your mice.' = 'Do not expect help from strangers.'
(lit.: someone else's cat won't catch a mouse)

There is another subject idiom that involves the ergative of *e* 'blood'; this expression is most often used when describing the behavior of animals that are acting dangerous or belligerent, for example:

(109) E-y-ä debi ɣwˁay b-ik'-ur-xosi (yoł).
blood-OS-ERG 2SG.GEN1 dog.ABS.III III-burn.ITR-CAUS-PRS.PTCP be.PRS
'Your dog is being aggressive.' (lit.: blood is burning your dog)

When used to describe a person's behavior, this idiom conveys irony or sarcasm, talking about someone who lost their temper. Thus:

(110) Suƛƛi-n e-y-ä ža Ø-ik'-ur-si.
suddenly-and blood-OS-ERG DEM.ABS(.I)-and I-burn.ITR-CAUS-PST.WIT
'And suddenly he blew a gasket.' (lit.: … blood burned him)

3.2. Potential construction

If a transitive verb appears in the optative or in the potential form in *–eł-*,[12] its agent will appear in the poss-essive and its patient in the absolutive. Compare the transitive clause in (111a) and the optative form in (111b). (112) contrasts a transitive clause (a) with its potential-form counterpart (b):

(111) a. El-ä yedu t'ek t'et'er-si.
1PL-ERG DEM book.ABS.II read-PST.WIT
'We read that book.'
b. Elu-q yedu t'ek t'et'r-*(oƛ).
1PL-POSS.ESS DEM book.ABS.II read-OPT
'We are able to read that book.'
(112) a. El-ä yedu t'ek t'et'er-si.
1PL-ERG DEM book.ABS.II read-PST.WIT
'We read that book.'

[12] Recall that the optative is a regular tense-aspect-mood form in Tsez, and thus largely in complementary distribution with other tense-aspect-mood forms. The potential suffix derives a new verb stem which can then be conjugated in the usual way. See CH. YY[VERB MORPH] for details.

b. Elu-q yedu t'ek t'et'ra-*(ł-)xo.
1PL-POSS.ESS DEM book.ABS.II read-POT-PRS
'We are/will be able to read that book.'

In complex verbs, the light verb appears in the optative or potential form:

(113) a. Besuroqu-z-ä riło ɣank'izi r-oq-si.
fisherman-PL.OS-ERG boat.ABS.IV drown IV-do-PST.WIT
'The fishermen sank the boat.'
b. Besuroqu-za-q riło ɣank'izi r-oy*(ƛ)-xo.
fisherman-PL.OS-POSS.ESS boat.ABS.IV drown IV-do-OPT-PST.WIT
'The fishermen could sink the boat.'
(114) a. Doxtur-ä roƛnoku-ni-r kumak b-oy-s.
doctor-ERG sick.person-DEF-LAT help.ABS.III III-do-PST.WIT
'The doctor helped the patient.'
b. Doxtur-qo nesä nesi-r kumak b-oy-*(ƛ)-xo.
doctor-POSS REFL.I-LAT help.ABS.III III-do-OPT-PRS
'The doctor is able to help himself.'

In addition to the productive use of transitive verbs in the potential construction, the same construction also occurs with several intransitive verbs: AGR-*iz*- 'rise', AGR-*et'*^{w}- 'tear, be torn', *łiy*- 'be over, end', AGR-*iq*- 'be gotten, be obtained, be found', and AGR-*eɣ*^{w}- 'be defeated' (Imnajšvili 1963: 262-263). These verbs do not have to appear in the optative or potential form (although they can do so when contextually appropriate), but in all instances, their inadvertent subject appears in the poss-essive and the patient in the absolutive. Thus:

(115) Nesi-q b-izi-s meši.
DEM.I-POSS.ESS III-rise-PST.WIT calf.ABS.III
'He was able to lift the calf.' (lit.: the calf rose on him)
(116) R-at'u-yä dow-qo yedu roč?
IV-tear.FUT-INTERR 2SG-POSS.ESS DEM rope.ABS.IV
'Will you be able to tear this rope?' (lit.: will this rope be torn on you)
(117) Łiy-x-ānu dä-q ža raład.
end-PRS-NEG 1SG-POSS.ESS DEM sea.ABS.IV
'I cannot drink up (finish) this sea.'
(118) Debi baru y-exu-s dä-q.
2SG.GEN1 wife.ABS.II II-die-PST.WIT 1SG-POSS.ESS
'I accidentally killed your wife.' (lit.: your wife died on me)
(119) Nesi-q b-iqi-n boko.[13]

[13] Imnajšvili (1963: 263) discusses the contrast between sentences such as (119), with the inadvertent agent in the poss-essive, and (i), where the lative form denotes a recipient. The inadvertent agent is construed as more active, more involved in the process of obtaining something, than the recipient.

DEM.I-POSS.ESS III-be.gotten-PST.WIT fur coat.ABS.III
'He obtained a fur coat.'

(120) Nesi-q eli b-eɣu-s.
DEM.I-POSS.ESS 1PL.ABS.IPL 1PL-be.defeated-PST.WIT
'We got defeated by him.'

The use of the poss-essive form for encoding the inadvertent or potential agent in these constructions is not accidental. As we have seen in other instances, the poss-essive form is also used to encode the recipient in a temporary transfer (section 2.5) and the inadvertent agent in an accidental clause (section 2.6). The poss-essive form is also found on causees in causatives (see section 6 below). In all these instances, the noun phrase in the poss-essive encodes a participant whose engagement in the event is not long-term or completely volitional. Yet another use of this form is observed in impersonal constructions with infinitival clausal complements, discussed in Ch. YY [Clausal complements]. With respect to reflexive binding, the poss-essive noun phrase in the potential construction behaves as a subject—it binds the absolutive argument, and cannot be bound by it (see CH. YY [Reflexives and anaphora]).

4. Ditransitives

4.1. Verbs of transfer

The inventory of verbs of transfer is not very large; it includes the verbs of giving, as well as 'teach', 'send', and 'show'. Verbs indicating motion toward a goal or recipient, such as 'throw' and 'kick', do not act as ditransitives. Within the verbs of transfer, the patient (object of transfer) is always in the absolutive. The only alternation is observed in the form of the recipient or goal, which varies depending on whether the transfer is permanent or temporary and, for inanimate goals, on their location in space.

The verbs of giving, *teƛ-* 'give (away from the speaker/agent)' and *neƛ-* 'give (toward the speaker/agent)' take the agent in the ergative, the object of transfer in the absolutive, and the recipient in the lative or poss-essive/poss-lative. The choice between the lative and forms of the possessive series is determined by whether the transfer is permanent (lative) or temporary (poss-essive or poss-lative); consider a similar contrast in the intransitives of possession in section 2.5 above. The contrast between permanent and temporary possession typically plays out when the object of transfer is a tangible, material thing; when metaphoric transfer applies to answers, permissions, thoughts, and other abstract objects, the recipient always appears in the lative.

Some examples describing the transfer of tangible objects:

(121) Nes-ä ža kaɣat kid-be-qo-r teƛ-si.
DEM.I-ERG DEM letter.ABS.II girl-OS-POSS-LAT give-PST.WIT

(i) Nesi-r b-iqi-n boko.
DEM.I-LAT III-be.gotten-PST.WIT fur coat.ABS.III
'He received a fur coat.'

'He gave that letter to the girl.'

(122) ʕAdal-qo-r qaca-s c'araʕ teƛ, c'odor-qo-r
fool-POSS-LAT wood-GEN1 dishes.ABS.III give.IMPER smart.person-POSS-LAT
pak-mo-s c'araʕ teƛ.
copper-OS-GEN1 dishes.ABS.III give.IMPER
'Don't waste your breath on fools.' (lit.: Give wooden dishes to the fool, give copper dishes to the smart one)

(123) Neł-ä elu-r łi neƛ-xosi [yoł] ƛˢeb-a-x-äy
DEM.nI-ERG 1PL-LAT water.ABS.III give-PRS.PTCP be.PRS year-OS-AD-ABL
sosit'a el-ä neła-r y-ac'-ani-x kid teƛ-näy.
once 1PL-ERG DEM.nI-LAT II-eat-MASD-AD.ESS girl.ABS.II give-COND
'It [the dragon] gives us water if once a year we give him a girl for him to eat.' (ʕAliqilič:49)

(124) Es-na-z-ä eniw-r xiriyaw sajɣat teƛ-si.
sibling-PL-OS-ERG mother-LAT expensive gift.ABS.III give-PST.WIT
'The siblings gave Mother an expensive gift.'

(125) El-ä dow-qo-r bišom ɣˢuruš q'arza neƛ-ān.
1PL-ERG 2SG-POSS-LAT hundred rouble.ABS.II debt give-FUT.DEF
'We will loan you a hundred roubles.'

Examples of abstract transfers:

(126) Mi dä-r izmu neƛ-nay…
2SG.ERG 1SG-LAT permission.ABS.III give-COND.CVB
'If you give me your permission…'

(127) Tawad-ä yisi-r žawab teƛ-no.
Tawadi-ERG DEM-LAT answer.ABS.III give-PST.nWIT
'Tawadi gave them the answer.' (Ražbadinno Tawadinno:83)

(128) Ražbadin-ä-n barä-n Tawadi-r b-ˢeže barkala
Rajbaddin-ERG-and wife-ERG-and Tawadi-LAT III-big thanks.ABS.III
teƛ-no.
give-PST.nWIT
'Rajbaddin and his wife thanked Tawadi profusely.' (Ražbadinno Tawadinno:200)

All three main arguments of the verbs 'give' can be omitted in context; if absent, they are still understood as involved in the event. If the immediate context does not disambiguate the participants, the null pronominals can be interpreted indefinitely. Consider some examples:

(129) Učitel-ä ža kaɣat kid-be-qo-r teƛ-si.
teacher-ERG DEM letter.ABS.II girl-OS-POSS-LAT give-PST.WIT
'The teacher gave that letter to the girl.'

(130) *pro* ža kaɣat kid-be-qo-r teƛ-si.
ERG DEM letter.ABS.II girl-OS-POSS-LAT give-PST.WIT
'S/He/Someone gave that letter to the girl.'

(131) Učitel-ä *pro* kid-be-qo-r teƛ-si.
teacher-ERG ABS girl-OS-POSS-LAT give-PST.WIT

'The teacher gave it/something to the girl.'

(132) Učitel-ä ža kaɣat *pro* teƛ-si.
teacher-ERG DEM letter.ABS.II LAT/POSS.ESS give-PST.WIT
'The teacher gave that letter to him/her/someone.'

(133) A: Mi irbahin-e-r micxir teƛ-ä?
2SG.ERG Ibrahim-OS-LAT money.ABS.II give-PST.INTERR
'Did you give Ibrahim (the) money?'
B: Hudu, *pro* *pro* *pro* teƛ-si.
yes give-PST.WIT
'Yes, I did.'

There are two verbs meaning 'teach', *moʕł-* and the causative of *t'et'r-* 'learn, read'. With both verbs, the agent is expressed in the ergative, the patient (object of instruction) in the absolutive, and the recipient in the poss-essive. For example:

(134) Učitel-ä q'ʕuya-ħukmat-yo-ł-zo žek'u-za-q
teacher-ERG foreign-government-OS-CONT-ATTR.OS person-PL.OS-POSS.ESS
cezi-ya-s mec moʕłi-x/t'et'r-er-xo.
Tsez-OS-GEN language.ABS.III teach-PRS/learn-CAUS-PRS
'The teacher is teaching the Tsez language to foreigners.'

(135) R-igu šebin moʕłi-n zow-n-ānu mi
IV-good thing.ABS.IV tell-PFV.CVB AUX.PST-PST.nWIT-NEG 2SG.ERG
dä-q.
1SG-POSS.ESS
'You have told me the wrong thing.' (lit.: you have not taught me a good thing)
(ʕAliqilič:88)

The verb meaning 'send' is the lexicalized causative of the inchoative verb AGR-*eg-* 'open up, set loose, break free'; it take the ergative agent, absolutive patient, and a recipient/goal in one of a number of spatial forms. Animate recipients are typically encoded in the lative or poss-essive; inanimate goals showing destination can appear in a number of essive, lative, or versative forms with different reference points, depending on the context.

(136) El-ä eniw-qo-r kaɣat y-eger-si.
1PL-ERG mother-POSS-LAT letter.ABS.II II-send-PST.WIT
'We sent the/a letter to Mother.'

(137) Babi-y-ä Sult'an šahar-y-ā-r/šahar-y-ā-ɣor Ø-egir-xo.
father-OS-ERG Sultan.ABS.I city-OS-IN-LAT/city-OS-IN-VERS I-send-PRS
'Father is sending Sultan to the city.'

With a female patient and the goal in the ad-essive, 'send' carries the specialized meaning 'marry off':

(138) Di dow-zo Goqi-x kid y-egir-ān.
1SG.ERG 2SG-ATTR.OS Goqi-AD.ESS girl.ABS.II II-send-FUT.DEF
'I will give my daughter in marriage to your Goqi.' (Goqin zirun:12)

The verb AGR-*ukar*- 'show' is the causative of AGR-*ukad*- 'see (be visible)', with the agent in the ergative, the recipient (causee) in the poss-essive, and the object in the absolutive:

(139) Eni-y-ä kid-be-q misal b-uka-r-si.
mother-OS-ERG girl-OS-POSS.ESS example.ABS.III III-see-CAUS-PST.WIT
'Mother gave (showed) the girl an example.'

(140) Učitel-ä xex-za-q kino r-uka-r-si.
teacher-ERG child-OS-POSS.ESS movie.ABS.IV IV-see-CAUS-PST.WIT
'The teacher showed the children a movie.'

The order of objects in the ditransitive structure is quite free, with no restrictions based on animacy or definiteness. As in other structures, there are two main tendencies in the preverbal domain: first, longer constituents appear before shorter ones; second, informationally given material precedes new material. To illustrate the latter tendency, consider that the order in (140) is more likely to correspond to the English double object construction (which is what is used in the translation), whereas the order in the following example is best represented by the English dative construction:

(141) Učitel-ä kino xex-za-q r-uka-r-si.
teacher-ERG movie.ABS.IV child-OS-POSS.ESS IV-see-CAUS-PST.WIT
'The teacher showed a/the movie to the children.'

In the following example, the existence of the people receiving gifts is presupposed; what matters is who receives which gift. The optional coordinating 'and' appears on the presupposed material:

(142) Łic'o=ric'ak'-no! Teƛ gagali-bi(-n) baru-qo-r,
mix.up-PROH give.IMPER flower-PL.ABS.nIPL-and wife-POSS-LAT
teƛ maroženi(-n) xex-za-qo-r.
give.IMPER ice-cream.ABS.IV-and child-OS-POSS-LAT
'Don't mix them up! Give the flowers to the hostess (lit.: to the wife) and ice-cream to the children.'

4.2. Verbs of speaking

Several verbs of speaking act as ditransitives as well: *es-, eƛ-, esir-*, and *moł-*.[14] With these verbs, the agent appears in the ergative and the noun phrase denoting what is spoken or asked appears in the absolutive. This absolutive position can be equally filled by a noun phrase or pronoun, a

[14] The verb *xabaryad*- 'speak, talk' is intransitive; the example below illustrates its use:

(i) Xexbi xabaryad-a b-uygon b-oq-si.
child.ABS.III speak-INF III-already III-become-PST.WIT
'The child already started talking.'

clausal nominalization, or a full clause with the quotative suffix *–ƛin*. The encoding of the addressee varies by verb, as we show below. Sound-emission verbs denoting manner (such as *šupi-šepƛ-* 'whisper', *bubuƛ-/wuwuƛ-* 'mumble', *ħarƛ-* 'snore', *q'ʷˤaq'ʷˤaƛ-* 'croak', *ħeħƛ-* 'wheeze', *zuzuƛ-* 'buzz', etc.) are always intransitive.

The ditransitive verb *es-* means 'tell', with the addressee in the poss-lative:

(143) Eniw-qo-r yedu xabar es-o.
mother-POSS-LAT DEM.nI news.ABS.III tell-IMPER
'Tell Mother this news.'

If contextually recoverable, all the arguments of *es-* can be omitted, for example:

(144) *pro* *pro* *pro* es-ā-č'in.
tell-FUT-NEG
'(I) won't tell.'

The ditransitive verb *eƛ-* means 'speak; say', and the addressee is again in the poss-lative. As with *es-*, all the arguments of *eƛ-* can be omitted if they are recoverable from context. Compare the following examples without and with the addressee:

(145) *pro* eƛi-x ža elu-s maħ yoł-äsi
ERG say-PRS DEM.ABS.(I) 1PL-GEN1 spirit.ABS.III be.PRS-RES
žek'u zow-n[-ƛin].
man.ABS.I be.PST-PST.nWIT-QUOT
'They say that he was the man who belonged to our spirit.' (ʕAliqilič:173)

(146) Aždaħ-ä (yisi-qo-r) rožі eƛi-n-ānu.
dragon-ERG DEM.I-POSS-LAT word.ABS.IV say-PST.nWIT-NEG
'The dragon did not say a word (to him).' (ʕAliqilič:58)

The difference between the meanings of *es-* and *eƛ-* can also be demonstrated by the difference in meaning between their past participles. Compare:

(147) a. [äsi-ru] rožі
tell-PST.PTCP word.ABS.IV
'the word that was repeated (re-told) to s.o.'

b. [xabar äsi-ru] žek'u
story.ABS.III tell-PST.PTCP man.ABS.I
'the man that told a/the story; story teller'

(148) a. [äƛi-ru] rožі-n r-äq-inč'i, ʕomoy-ce
say-PST.PTCP word.ABS.IV-and IV-become.FUT-NEG donkey-EQUAT
boc'i-n b-äq-inč'i.
wolf.ABS.III-and III-become.FUT-NEG
'Not all things come true.' (lit.: spoken word does not get fulfilled, and one that is donkey-like does not turn into a wolf)

b. [rožі äƛi-ru] žek'u

word.ABS.IV tell-PST.PTCP man.ABS.I
'the man that said a/the word'

The causative of *es-* is the ditransitive verb *esir-* 'ask' (lit.: make tell). Its agent appears in the ergative, its addressee in the poss-essive (thus conforming to the pattern of causee encoding: see section 6.2 below), and the noun phrase referring to the questioned element appears in the absolutive. All three core arguments can be omitted, but are contextually presupposed. Consider an example with all the participants overtly expressed (149) and another example where both objects are omitted (150):

(149) "Mi šebi žek'u t'o-r Ø-ay-äsi-λin?"
2SG.ABS what.ATTR man.ABS.I here-LAT I-come-RES-QUOT
esir-no aždaħ-ä yisi-q.
ask-PST.nWIT dragon-ERG DEM.I-POSS.ESS
'"Who are you, the one who came here?" the dragon asked him.' (ʕAliqilič:189)

(150) Nes-ä *pro* *pro* esi-x-ānu.
DEM.I-ERG ask-PRS-NEG
'He has not asked.'

The verb 'answer' is a complex form, consisting of *žawab* 'answer' in the absolutive and one of the two verbs of giving (depending on the direction). Hence it is naturally ditransitive; the agent appears in the ergative, and the recipient of the answer in the lative:

(151) C'alduqan-ä učitel-e-r žawab b-ig teλ-si.
student-ERG teacher-OS-LAT answer.ABS.III III-well give-PST.WIT
'The student answered the teacher well.'

The equivalent of 'answer a question' is the same complex verb, with the word *sual* 'question' appearing as a genitive modifier of *žawab,* or as a noun phrase in the lative:

(152) a. Nes-ä yedu [sual-e-s žawab] yisi-r
DEM.I-ERG DEM question-OS-GEN1 answer.ABS.III DEM.I-LAT
teλ-inč'u.
give-PST.WIT.NEG

b. Nes-ä yedu [sual-e-r] [žawab] yisi-r
DEM.I-ERG DEM question-OS-LAT answer.ABS.III DEM.I-LAT
teλ-inč'u.
give-PST.WIT.NEG
'He did not answer that question.'

A number of complex predicates are used to denote particular speech situations: the giving of thanks; greeting; leave-taking. These verbs are typically formed by the combination of a noun with the meaning 'thank you', 'hello', 'good-bye', 'congratulations,' and the transitive light verb AGR-*od-* 'do'. The recipient of the speech act appears in the lative or poss-lative, with the choice of a particular form lexically specified for each predicate. For example:

(153) a. Bar-ä maduhal-qo-r hiƛ'i=baq'i r-oy-s.
wife-ERG neighbor-POSS-LAT greetings.ABS.nIPL nIPL-do-PST.WIT
b. Bar-ä maduhal-qo-r salam/worč'ami b-oy-s.
wife-ERG neighbor-POSS-LAT greetings.ABS.III III-do-PST.WIT
'The wife said hello to the neighbor.'[15]

(154) a. Už-ä eniw=babiw-r q'ˤomexłik' b-oy-x.
boy-ERG parents-LAT good-bye.ABS.III III-do-PRS
'The boy says good bye to his parents.'
b. Už-ä eniw=babiw-r barkala b-oy-s.
boy-ERG parents-LAT thanks.ABS.III III-do-PST.WIT
'The boy thanked his parents.'

The verb 'congratulate' is formed via the combination of a non-nominal component and the same light verb:

(155) Debe-r ecno-ni ƛeb barkizi y-oy-x (di).
2SG-LAT new-DEF year.ABS.II congratulate II-do-PRS 1SG.ERG
'I wish you a happy new year!' (lit.: I congratulate the new year to you)

Compare the case frame of *barkizi* AGR-*od*- with the English *congratulate someone on/for something,* which takes the recipient of good wishes as the direct object and the denotation of the special reason as a prepositional phrase. The Tsez verb seems to show a reversal of such a frame, with the reason as the absolutive object and the recipient of good wishes in the lative. This alternative linking (as compared to the one found in more familiar languages) brings us to a whole group of verbs which we will be referring to as "ditransitive transitives". They are discussed in the next section.

4.3. Verbs of contact: "Locative transitives"

Tsez has a sizeable group of verbs all of which express physical contact or connection of some kind and which have three arguments: the agent in the ergative, the instrument or medium of contact in the absolutive, and the object with which contact is established in one of the spatial forms. For example, consider the verb AGR-*iħ-,* which is semantically the broadest among the verbs of this group, with meanings including 'spread, stroke, smear, scratch, paint' (Xalilov 1999: 62). We will be using the more general English equivalent 'put', which can also take a direct object and adpositional complement (another possible English equivalent is 'apply something to something'). In (156), AGR-*iħ*- means 'stroke'; the absolutive object expresses the instrument, and the recipient of stroking, the cat, is expressed in the poss-essive:

(156) Kid-b-ä k'et'u-q reƛa r-iħi-s.
girl-OS-ERG cat-POSS.ESS hand.ABS.IV IV-put-PST.WIT
'The girl stroked a cat.' (lit.: put hand onto the cat)

[15] *hiƛ'i=baq'i* is the Tsez word denoting greetings, and the words used in (153b) are Avar borrowings.

In the next example, the same verb can be translated as ‘spread’:

(157) Kid-b-ä magalu-ƛ’ rił r-iħi-s.
girl-OS-ERG bread-SUPER.ESS butter.ABS.IV IV-put-PST.WIT
‘The girl spread butter over the bread.’ (lit.: put butter on the bread)

In (158), the closest English equivalent is ‘wipe’:

(158) Eni-y-ä aki-q at’iw č’orto r-iħi-x.
mother-OS-ERG window-POSS.ESS wet rag.ABS.IV IV-put-PRS
‘Mother is wiping the window with a wet cloth.’

In the next example, the same verb corresponds to the English ‘iron’:

(159) Kid-b-ä ged-mo-ƛ’ ito r-iħi-x.
girl-OS-ERG dress-OS-SUPER.ESS iron.ABS.IV IV-put-PRS
‘The girl is ironing a dress.’

And finally, in (160), the closest correspondence to AGR-*iħ*- is ‘paint’:

(160) El-ä ƛex-e-ƛ lak b-iħi-s.
1PL-ERG ceiling-OS-SUB.ESS paint.ABS.III III-put-PST.WIT
‘We painted the ceiling.’

Other uses, which we will not illustrate here, include *mołu y-iħ*- ‘scratch (lit.: nail/claw put)’, *q’alam b-iħ*- ‘cross out (lit.: pencil put)’, and *meš b-iħ*- ‘sweep (lit.: broom put)’.

In all these uses, the only set of cases available to AGR-*iħ*- is what is shown above; no alternations of the type found in the English *spray* or *load* verbs are possible; compare the grammatical example in (157) and its ungrammatical counterpart with an attempted object-marking alternation:

(161) *Kid-b-ä magalu rił-e-d b-iħi-s.
girl-OS-ERG bread.ABS.III butter-OS-INS III-put-PST.WIT
(‘The girl spread the bread with butter.’)

Other verbs which belong to the same group as AGR-*iħ*- include: *caƛ*- ‘throw’; AGR-*egir*- ‘hit (lit.: send)’; AGR-*ok’*- ‘hit’; AGR-*al*- ‘hit’; AGR-*izir*- ‘hit’ (causative of ‘rise’); AGR-*iti*- ‘touch’ (glossed as ‘join’ below);[16] AGR-*oɣ* ‘scratch’; AGR-*aƛ*- ‘sweep’; AGR-*ic’*- ‘fill’, and its

[16] This verb has a different use as an intransitive, in an idiom with the word ‘tooth’:

(i) Yedu xabar dä-z k’ica-ƛ b-iti-x.
DEM story.ABS.IPL 1SG.GEN2 tooth-SUB.ESS III-touch-PRS
‘This story annoys me.’/ ‘I am sick and tired of this story.’

more specific realizations *uba b-ic'*- 'kiss (kiss fill)', *ałni b-ic'*- 'hug (hug fill)', *meč'o b-ic'*- 'embrace (neck fill)', and *muq'u b-ic'*- 'gulp (gulp fill)'; *uba b-od*- 'kiss (kiss do), *ałni b-od*- 'hug (hug do)'; *ʕaˁqu kuč*- 'wet with urine (urine drop)'; *meš(-kuro) r-aˁƛ*- 'sweep, clean (broom(-washbasin) put/deploy)'. With all these verbs, the instrument is in the absolutive, and the object involved in the contact is in one of the oblique forms, often in the poss-essive because this is the form encoding the recipient of a (temporary) transfer. Some examples:

(162) Nes-ä bero-q mec b-iti-s.
DEM.I-ERG icicle-POSS.ESS tongue.ABS.III III-join-PST.WIT
'He touched the icicle with his tongue.' (lit.: joined his tongue on to the icicle)

(163) Neł-ä ħalt'-u-q ħalt'i b-iti-x-ānu.
DEM.nI-ERG work-OS-POSS.ESS work.ABS.III III-join-PRS-NEG
'She doesn't lift a finger.' (lit.: does not join work to work)

(164) Eni-y-ä xex-za-q uba b-ic'-si.
mother-OS-ERG child-OS-POSS.ESS kiss.ABS.III III-fill-PST.WIT
'Mother kissed the child.'

(165) Nes-ä ła-s muq'u b-ic'-si.
DEM.I-ERG water-GEN1 gulp.ABS.III III-fill-PST.WIT
'He took a gulp of water.'

(166) Čanaqan-ä zey-s/zey-qo tupi caƛi-n.[17]
hunter-ERG bear-GEN1/bear-POSS.ESS rifle.ABS.IV throw-PST.nWIT
'The hunter shot (at) the bear.' (lit.: threw rifle)

(167) Nes-ä dä-z łara-ł besi caƛi-s.
DEM.I-ERG 1SG-GEN2 belly-CONT.ESS fist.ABS.IV throw-PST.WIT
'He hit me in the stomach with his fist.' (lit.: threw fist…)

(168) Neła ɣana-za-s nocu caƛ-o!
DEM.nI.OBL woman-OS-GEN1 saliva.ABS.II throw-IMPER
'Spit at this woman!' (lit.: throw this woman's saliva) (Beqes ʕUneyzat:87)

(169) Xex-z-ä ɣˁeƛo-x-or ʕaˁqu kuči-n.
child-OS-ERG pants-AD-LAT urine.ABS.IV drop-PST.nWIT
'The child wet his pants.'

(170) Už-ä q'ˁir-yo-ł ok'o b-ok'-si.
boy-ERG plank-OS-CONT.ESS nail.ABS.III III-fill-PST.WIT
'The boy hit a nail into the plank.'

(171) Čanaqan-ä gulu-z gugyo-ƛ' čuret'/besi
hunter-ERG horse-GEN2 back-SUPER.ESS whip.ABS.III/fist.ABS.III
b-ok'-si.
III-hit-PST.WIT
'The hunter hit the horse on the back with a whip/fist.'

(172) Uži-z r eƛ'a-ƛ' č'ir y-ał-xo babi-y-ä.
boy-GEN2 hand-SUPER.ESS belt.ABS.II II-hit-PRS father-OS-ERG
'Father hits the boy on the hand with a belt.'

[17] Both the direct and the conative interpretations are available for this sentence and sentences of a similar sort.

As with the ditransitive verbs of transfer, all three arguments are presupposed by the argument structure of the respective verbs, but they do not have to be expressed if they are contextually recoverable. For example, in (156) above, it is possible to omit the absolutive *reƛa* 'hand' (the verb still agrees with it. Likewise, *całi-* in (166) or (167) can occur without the overt absolutive. In examples such as (171), it is possible to omit the absolutive or the super-essive, and furthermore, the head of the oblique noun phrase *gugyo-ƛ'* can be omitted just as well, in which case the sentence can be understood as meaning 'the hunter hit the horse with a whip/fist', with no particular part of horse in mind. Similarly, the mention of the boy's hand can be omitted in (172), and then the sentence can be understood more generally, as 'father hit the boy with a belt'. All these omissions may create the impression that these verbs have an unusual case frame.

Presumably, if the object of contact appears in an oblique case, it could have consequences for the grammar of resultatives. Resultatives are associated with the internal argument of a verb, as in the English examples below, where *the river* is the subject of an unaccusative, and *the table* is the object of *wipe* (see Rappaport Hovav and Levin 2001 for discussion and extensive references).

(173) The river froze solid.
(174) She wiped the table clean.

If the object is not expressed as a direct internal argument, this could imply that a resultative construction is not available. Tsez does not have resultatives in the English sense, and the meaning corresponding to the English resultatives is conveyed by different means. For instance, in the following examples, the resultant state is expressed by the main predicate, and the event leading to it that state is expressed by a complex noun phrase in a spatial form. This complex noun phrase is based on a masdar clause (indicated by brackets):

(175)	a.	[Neł-ä	č'orto	*pro*$_i$	r-iħ-ani]-ƛ-āy	istoli$_i$
		DEM.nI-ERG	rag.ABS.IV		IV-put-MASD-SUB-ABL	table.ABS.IV
		bac'adaw	r-oq-xo.			
		clean	IV-become-PRS			
	b.	[Neł-ä	č'orto	istoliw-q$_i$	r-iħ-ani]-ƛ-āy	*pro*$_i$
		DEM.nI-ERG	rag.ABS.IV	table-POSS.ESS	IV-put-MASD-SB-ABL	
		bac'adaw	r-oq-xo.			
		clean	IV-become-PRS			
		'The table became clean on the account of her (i.e. Mother's) wiping it.'				

It remains to be seen whether the use of locative-theme verbs of contact and the absence of resultatives are in fact related, and whether the "locative transitives" described here correlate with some other properties of Tsez. Verbs of contact, with the instrument in the absolutive and the object of contact in some oblique form, have been observed in other languages of the Nakh-Dagestanian family: in Ingush (Nichols 2011: 467-470), in Lezgian (Haspelmath 1993: 269-270), as well as in the close Tsez relatives Khwarshi (Khalilova 2009: 332) and Hinuq (Forker 2013: 485-486). A similar phenomenon has also been noted in other languages of the Caucasus (cf. Catford 1976: 44, who comments on such verbs in Northwest Caucasian languages). It is

therefore possible that locative transitives represent an areal feature; if so, this shared feature of the verbal lexicon could be explored in connection with other properties of Nakh-Dagestanian or Caucasian languages more generally.

5. Affective construction and cognition/perception verbs

5.1. Affective construction

Tsez, like many other Dagestanian languages, has a separate affective constuction (also called the "experiencer construction"), which typically involves a verb denoting perception or cognition. Several verbs that occur frequently in this construction include: AGR-*uk^{w}ad*- 'see', AGR-*iy*- 'know, understand', *koƛ'*- 'know, be trained, prepared for something', AGR-*et*- 'like, love, want, need', *teq*- 'hear', AGR-*ac*- 'dislike', AGR-*es*- 'find', *čuq*- 'recognize, understand', *šuƛ'*- 'forget'. They all share the same marking on their arguments: the experiencer, which is in most cases animate, appears in the lative form, and the stimulus is in the absolutive. The verb agrees with the absolutive argument and appears intransitive, an issue we will revisit at the end of this section.

Some examples of the affective construction follow, with more literal equivalents offered in parentheses:

(176) Nesi-r baru y-ukay-nč'i.
DEM.I-LAT wife.ABS.II II-see-PST.WIT.NEG
'He did not see (his) wife.' (lit.: the wife was not visible to him)

(177) Dä-r nesi-s ʕamal b-aci-x.
1SG-LAT DEM.I-GEN1 character.ABS.III III-dislike-PRS
'I can't stand his personality.' (lit.: his personality is distasteful to me)

(178) Elo-gon yisi-r surat-ce bercinaw kid
there-CONTR.TOP DEM.I-LAT picture-EQUAT beautiful girl.ABS.II
y-esu-n.
II-find-PST.nWIT
'And there, he found a picture-perfect beautiful girl.' (ʕAliqilič:168)
(lit.: a … girl turned out…)

(179) ƛirba-r biš^{w}a r-eti-x.
guest-LAT food.ABS.IV IV-want-PRS
'The guest wants food.' (lit.: the food is wanted to the guest)

(180) Elu-r mašina c'aq' b-et-äsi yoł.
1PL-LAT car.ABS.III very III-want-RES.PTCP AUX.PRS
'We badly need a car.' (lit.: car is wanted to us)

(181) Q'orola-z idu kid yäł-ru-łi esna-za-r
widow-GEN2 at.home girl.ABS.II be-PST.PTCP-NMLZ sibling-PL.OS-LAT
čuq^{ʕ}-no.
understand-PST.NWIT
'The brothers understood that the girl was at the widow's house.' (based on ʕOƛno esiwn, sis esiyn:37)
(lit.: that the girl was at the widow's house was understandable to the brothers)

(182) Xex-za-r ecno-ni igruška šuƛ'i-s.[18]
children-OS-LAT new-DEF toy.ABS.IV forget-PST.nWIT
'The children forgot (about) the new toy.' (lit.: the toy was forgotten to the children)

Some other affective predicates in this group are derived on the basis of the verbs listed above. For example, 'smell' is *maħ b-iy-*, literally 'to know a smell', and 'taste' is *t'aʕam b-iy-/gimu y-iy-*, literally meaning 'to know a taste'; in each case, the word 'smell' or 'taste' is in the absolutive argument position and the stimulus is expressed as the adnominal genitive (the complex noun phrase expressing stimulus is shown in brackets below):

(183) Dä-r [gagali-s maħ] b-iy-x.
1SG-LAT flower-GEN1 smell.ABS.III III-know-PRS
'I smell flowers.' (lit.: flower's smell is known to me)
(184) [Ci-yo-s t'aʕam] b-iy-ä deb-er?
salt-GEN1 taste.ABS.III III-know-INTERR 2SG-LAT
'Did you taste the saltiness?' (lit.: salt's taste is known to you)

Questions that arise in the analysis of the affective construction have to do with the status of the associated verbs (are these verbs transitive or intransitive?) and with the status of the absolutive and lative noun phrases (are they both arguments? which one is the subject?).

We will defer answering these questions to section 6.4, where we discuss the causativization of verbs that appear in the affective construction; to anticipate that discussion, we will show that these verbs are not a homogeneous class, but that they differ in their causativization, reflexivization characteristics, and participation in masdar relative clauses.

5.2. Perception and cognition verbs outside the affective construction

Not all predicates denoting internal or psychological states appear in the affective construction. For instance, such a common verb as AGR-*uƛ'*- 'fear; be afraid' is a regular intransitive predicate, with the experiencer in the absolutive and the stimulus in the poss-essive:

(185) [Yedu kid] [meži-z ɣ^{w}ʕay-q] y-uƛ'-xo.
DEM girl.ABS.II 2PL-GEN2 dog-OS-POSS.ESS II-fear-PRS
EXPERIENCER STIMULUS

[18] The verb 'forget' has another case frame, with the experiencer in the absolutive and the stimulus in the sub-ablative form:

(i) Xexbi šuƛ'i-s ecno-ni igruška-ƛ-äy.
children.ABS.(nIPL) forget-PST.WIT new-DEF toy-SUB-ABL
'The children forgot (about) the new toy.'

This development may be due to influence from Russian, where the verb *zabyvat' o* NP 'forget about' takes the nominative subject and a prepositional object.

'This girl is afraid of your dog.' (lit.: fears on your dog)

(186) [B-ˢaq'u-si xalq'i] [samolyot-ƛ'o zow-ani-q]
IPL-many-ATTR people.ABS.IPL plane-SUPER.ESS climb-MSD-POSS.ESS
EXPERIENCER STIMULUS
b-ˢuƛ'-xo.
IPL-fear-PRS
'Many people are afraid to fly.' (lit.: fear on climbing on the plane)

Imnajšvili (1963: 263) lists the verb AGR-*uƛ'*- among the intransitive verbs that participate in the potential construction (see section 3.2 above). However, unlike the poss-essive noun phrase that occurs with such intransitive verbs as AGR-*iq*-, AGR-*izi*-, etc., the stimulus in the poss-essive has no subject properties. As (186) shows, it is the absolutive, not the poss-essive, that determines control. In contrast to the other intransitive verbs that occur in the potential construction, the absolutive of AGR-*uƛ'*- can bind the poss-essive but not vice versa:

(187) a. ɣ$^{w\varsigma}$ay nełā neło-z ɣedu-q b-uƛ'-xo.
dog.ABS.III REFL.nI-GEN2 shadow-POSS.ESS III-fear-PRS
'The dog is afraid of its own shadow.'

b. *Nesä nesi-s ɣ$^{w\varsigma}$ay bet'erhan-qo b-uƛ'-xo.
REFL.I-GEN1 dog.ABS.III master-POSS.ESS III-fear-PRS
("His$_i$ dog is afraid of the owner$_i$.")

It is possible that at some stage, the verb AGR-*uƛ'*- patterned with several other intransitives that participate in the potential construction, as reflected in Imnajšvili's description. However, at the current stage of language use, this verb's argument mapping is as shown in (185).

The next psychological predicate we will consider is the intransitive complex verb *ʕažaib* AGR-*oq*- 'be surprised', which takes an absolutive subject experiencer and a stimulus in the super-essive:

(188) Dow-zo ʕamal-yo-ƛ' eli ʕažaib b-oq-si.
2SG-GEN2 deed-OS-SUPER.ESS 1PL.ABS surprised IPL-become-PST.WIT
'We were surprised by your behavior.'

A number of intransitive complex verbs denoting psychological states are psych-collocations with the nominal component *rok'u* 'heart'. The experiencer typically appears as the adnominal possessor of the absolutive, and the stimulus is in one of spatial forms. For example:

(189) Eniw-s rok'u uži-x r-oƛ-xo.
mother-GEN1 heart.ABS.IV boy-AD.ESS IV-hurt-PRS
'Mother worries about the boy/son.' (lit.: mother's heart hurts at the boy)

(190) Uži-s kid-b-ä rok'u r-ay-s.
boy-GEN1 girl-OS-IN.ESS heart.ABS.IV IV-come-PST.WIT
'The boy fell in love with the girl.' (lit.: boy's heart came into the girl)

(191) Nesi-q dey rok'u r-ay-x.
DEM.I-POSS.ESS 1SG.GEN1 heart.ABS.IV IV-come-PRS

'I have confidence in him.' (lit.: my heart comes upon him)

(192) Zarema-s rok'u ƛexu-x maduɣal-i-ƛ'.
Zarema-GEN1 heart.ABS.IV stay.behind-PRS neighbor-OS-SUPER.ESS
'Zarema is jealous of her neighbor.' (lit.: Z's heart stays on the neighbor)

When such set phrases are used in utterances, the noun phrase *rok'u* may even be omitted, which may create an impression of clauses without an absolutive argument. However, the absolutive *rok'u* is always understood.

6. Causatives

Tsez has several causative affixes (see CH. YY[VERB DER]), among which the suffix *–Vr-* is most productive, deriving causatives from all kinds of simple verbs. The suffix *–k'-* derives transitive verbs from intransitives in *–ł-,* which are in turn derived from non-verbal stems. Among complex verbs, the alternation between the intransitive light verb AGR-*oq-* and the transitive light verb AGR-*od-* also creates inchoative—causative pairs. There is no morphological causative of the verb 'be'. The interpretation of causatives is largely dependent on context, with the same form being able to express direct and indirect causation (see especially 6.4 below).

6.1. Causative of intransitive

Causatives formed from intransitive non-affective verbs are transitive; the causer appears in the ergative, and the causee in the absolutive. For instance:

(193) a. Eniw kid-be-ƛ'o-r žuka-t'a-ni qimat-yo-za-ƛ-äy
mother.ABS.II girl-OS-SUPER-LAT bad-DISTR-DEF grade-OS-PL.OS-SUB-ABL
duduɣ-xo.
berate-PRS
'Mother is railing at the girl for the bad grades.'

b. Eni-y-ä kid žuka-t'a-ni qimat-yo-za-ƛ-äy
mother-OS-ERG girl.ABS.II bad-DISTR-DEF grade-OS-PL.OS-SUB-ABL
duduɣ-ir-xo.
berate-CAUS-PRS
'Mother is berating the girl for the bad grades.'

(194) a. Nuci ɣˁay-ł łek'i-s.
honey.ABS.IV milk-CONT.ESS mix-PST.WIT
'The honey mixed with the milk.' (lit.: in milk)

b. Eni-y-ä nuci ɣˁay-ł łek'i-r-si.
mother-OS-ERG honey.ABS.IV milk-CONT.ESS mix-CAUS-PST.WIT
'Mother mixed honey with milk.' (lit.: in milk)

(195) a. Šeƛ'u at'i-ł-si.
clothing.ABS.IV wet-INTR-PST.WIT
'The clothes got wet.'

b. Qem-ä šeƛ'u at'i-k'-si.
rain-erg clothing.abs.iv wet-CAUS-PST.WIT

'Rain made the clothes wet.'

(196) a. Uži k'ik'e-ł-si.
boy.ABS.I teased-INTR-PST.WIT
'The boy got teased.' (with the implication that he got upset because of teasing)

b. Kid-b-ä uži k'ik'e-k'-si.
girl-OS-ERG boy.ABS.I teased-CAUS-PRS
'The girl is teasing/ridiculing the boy.'

Thus, causatives of intransitives are regular transitive verbs, with the agent (causer) in the ergative and causee in the absolutive case. With the exception of frozen forms, causativization adds a participant, and that participant is always mapped into the agent or agent-like argument of a given event.

6.2. Causative of transitive

Causatives of transitives are formed by adding the suffix *–Vr-* to the verb stem. The resulting verb is ditransitive, with the causer in the ergative and the original absolutive object retaining its marking. The form of the causee depends on animacy. If the noun phrase denoting causee is perceived as animate, it appears in the poss-essive; if inanimate, it appears in the sub-essive. The majority of transitive causees are animate, which may create an impression that the poss-essive is the only encoding option, but it is not. Consider the following examples:

(197) a. Allah-ä malaik-za-q/*malaik-za-ƛ c'ob
God-ERG angel-PL.OS-POSS.ESS/angel-PL.OS-SUB.ESS mercy.ABS.III
b-od-ir-no.
III-do-CAUS-PST.nWIT
'God made the angels bring mercy.'

b. Allah-ä qema-ƛ/*qema-q raƛ'
God-ERG rain-SUB.ESS/rain-POSS.ESS land.ABS.IV
at'i-k'-er-no.
wet-TR-CAUS- PST.nWIT
'God made rain irrigate the earth.'

Examples of transitive causatives have already appeared above, cf. (139), (140). The argument encoding in these causatives is similar to that observed in the regular ditransitive, but there, the recipient is in the lative/poss-lative, whereas the animate causee in the ditransitive causative appears in the poss-essive:

(198) a. Nes-ä ža kaɣat kid-be-qo-r teƛ-si.
DEM.I-ERG DEM letter.ABS.II girl-OS-POSS-LAT give-PST.WIT
'He gave that letter to the girl (temporarily).'

b. Nes-ä ža kaɣat kid-be-q t'et'r-er-si.[19]
DEM.I-ERG DEM letter.ABS.II girl-OS-POSS.ESS read-CAUS-PST.WIT
'He made the girl read that letter.'

[19] The verb t'et'r-er- can also be used in the meaning 'teach', as shown in section 5.1 above.

The marking of causativity on transitives is quite common and such clauses often appear where one would expect object control clauses introduced by the verbs ‘ask’, ‘order’ or ‘remind’. The difference between volitional (indirect) and non-volitional (direct) causation is determined on the basis of context. The next sentence is ambiguous between direct and indirect causation:

(199) Eni-y-ä kid-be-q ac y-uq-ir-si.
mother-ERG girl-OS-POSS.ESS door.ABS.II II-close-CAUS-PST.WIT
‘Mother made the girl close the door.’
‘Mother reminded the girl to close the door.’

As with other verbs, arguments of causatives can be omitted if they are contextually recoverable:

(200) Doxtur-ä xex-za-q ħaƛu-r-no.
doctor-ERG child-OS-POSS.ESS drink-CAUS-PST.nWIT
‘The doctor made the child drink.’

6.3. Polyvalent causatives

Causative of ditransitives have four arguments, with the causee in the ergative, the causer in the poss-essive and the remaining arguments preserving the case forms of the base clause. This leads to a tritransitive or polyvalent construction (see Kittilä 2007b for a discussion of such constructions from a typological perspectives). For example:

(201) Učitel-ä sult’an-qo kid-be-r t’ek
teacher-ERG Sultan-POSS.ESS girl-OS-LAT book.ABS.II
teƛ’-er-si.
give-CAUS-PST.WIT
‘The teacher made Sultan give the book (back) to the girl.’

(202) Eni-y-ä kid-be-q žigon ged-mo-ƛ’
mother-OS-ERG girl-OS-POSS.ESS again dress-OS-SUPER.ESS
ito r-iħi-r-si.
iron.ABS.IV IV-put-CAUS-PST.WIT
‘Mother made the girl iron the dress again.’

(203) Eniw=babi-y-ä učitel-qo uži-q darsi
parents-OS-ERG teacher-POSS.ESS boy-POSS.ESS lesson.ABS.III
moˤɬ-ir-xo.
teach-CAUS-PRS
‘The parents are making the teacher teach the boy.’
‘The parents are asking the teacher to teach the boy.’

Since some ditransitive verbs already subcategorize for noun phrases in the poss-essive and causativization adds a poss-essive causee, it is possible to have two (or more) identically marked constituents in this construction, as in example (203) above. In this case, discriminating the roles of the two poss-essive arguments is facilitated by context, but in principle, such sentences can be ambiguous; for instance, in (204), either Sultan or the girl can be interpreted as the causee.

Speakers rely on word order to resolve the ambiguity, with the first poss-essive interpreted as the causee:

(204) a. Učitel-ä sult'an-qo kid-be-q
teacher-ERG Sultan-POSS.ESS girl-OS-POSS.ESS
sual bič'zi b-oy-er-si.
question.ABS.III understand III-do-CAUS-PST.WIT
'The teacher made Sultan explain the question to the girl.'
b. Učitel-ä kid-be-q sult'an-qo
teacher-ERG girl-OS-POSS.ESS Sultan-POSS.ESS
sual bič'zi b-oy-er-si.
question.ABS.III understand III-do-CAUS-PST.WIT
'The teacher made the girl explain the question to Sultan.'

Another disambiguation startegy is to mark the causee with the topic marker *–n(o)*, thus:

(205) Ħakim-ä učitel-qo-n xex-za-q
boss-ERG teacher-POSS.ESS-TOP child-OS-POSS.ESS
kino r-uka-r-er-si.
movie.ABS.IV IV-see-CAUS-CAUS-PST.WIT
'The boss made/asked the teacher (to) show the children a movie.'

Heavy causatives such as the ones presented here may not get used too frequently but our elicitations show that they are certainly possible.

6.4. Causative of cognition/perception verbs

For cognition/perception verbs with a lative experiencer and an absolutive stimulus, we observe two main patterns of causativization. One pattern creates transitive verbs, the other, ditransitive. Causativization of perception and cognition verbs outside the affective construction follows standard rules of causative formation for intransitives or transitives (see section 6.4.3 for the discussion of 'fear').

6.4.1. Transitivization of cognition/perception verbs

With a subset of cognition/perception verbs, namely, 'know', 'forget', 'find', and the verbs denoting the four non-visual senses ('hear', 'feel', 'taste', 'smell'), causativization creates volitional verbs whose agent corresponds to the experiencer in the affective construction. This is represented schematically in (206):

(206) affective: Experiencer-LAT Stimulus-ABS V
|
causative Agent-ERG Stimulus-ABS V-CAUS

To illustrate, compare the verb AGR-*es*- 'find', which combines wtih the absolutive stimulus and lative experiencer, and its causative counterpart AGR-*esur*- 'find; look for', which takes an ergative agent and absolutive stimulus/patient.[20] The verb changes from intransitive to transitive, and the roles change, with the experiencer now denoting the agent-like argument, but no new participants are introduced.

(207) a. Aħoˁ-r meši b-esu-s.
shepherd-LAT calf.ABS.III III-find-PST.WIT
'The shepherd found the calf.' [LAT-experiencer, ABS-stimulus]

b. Aħ-ä meši b-esu-r-si.
shepherd-ERG calf.ABS.III III-find-CAUS-PST.WIT
'The shepherd discovered/looked for the calf.' [ERG-agent, ABS-stimulus]

(208) a. Debe-r äƛi-ru šebin teq-yä?
2SG-LAT say-PST.PTCP thing.ABS.IV hear-INTERR
'Did you hear/understand what was said?' [LAT-experiencer, ABS-stimulus]

b. Uži-z-ä eniw=babi-y-ä äƛi-ru
boy-PL.OS-ERG parents-OS-ERG say-PST.PTCP
šebin teq-er-xo.
thing.ABS.IV hear-CAUS-PRS
'The sons (boys) listen to what their parents say.' [ERG-agent, ABS-stimulus]

(209) a. Nesi-r mi r-oy-xosi šebin r-aci-x.
DEM.I-LAT 2SG.ERG IV-do-PRS.PTCP thing.ABS.IV IV-dislike-PRS
'He does not like what you are doing.'

b. Nes-ä mi r-ädi-ru šebin
DEM.I-LAT 2SG.ERG IV-do-PST.PTCP thing.ABS.IV
r-ac-ir-no.
IV-dislike-CAUS-PST.nWIT
'He took offense at what you did.'

Likewise, with the complex verb 'smell', the experiencer in the affective construction corresponds to the agent-like argument in the transitive clause:

(210) a. Madina-r [gagali-s maħ] b-iy-n.
Madina-LAT flower-GEN1 smell.ABS.III III-know-PST.nWIT
'Madina felt the scent of flowers.' [LAT-experiencer, ABS-stimulus]

b. Madin-ä [gagali-s maħ] b-iy-r-si.
Madina-ERG flower-GEN1 smell.ABS.III III-know-CAUS-PST.WIT
'Madina smelled flowers.' [ERG-agent, ABS-stimulus]

The verb *šuƛ'*- 'be forgotten' takes the experiencer in the lative and the stimulus in the absolutive (see (182) above), whereas its causative counterpart takes the ergative agent/experiencer and the

[20] Whether the stimulus actually becomes a patient in the ergative construction is a contentious issue. We will continue to refer to that participant as stimulus, with the understanding that it corresponds to a patient-like (theme-like) argument.

absolutive stimulus. Given its semantics, it is not surprising that the corresponding causative verb is often used in imperatives:

(211) *pro* ac ħiš-a šuƛ'-är-no/*šuƛ'-no!
ERG door.ABS.II close-INF forget-CAUS-PROH/be.forgotten-PROH
'Don't forget to close the door!'

In some cases, the interpretive contrast between the intransitive psychological predicate and its transitive counterpart is quite subtle. Compare the intransitive AGR-*iy*- 'know; happen to know' and the transitive AGR-*iy-r*- 'know; get to know'. Example (212) is an appropriate comment on someone who grew up in a place where it was hard to learn Russian; (213) seems to emphasize commitment to knowing and maintaining one's language.

(212) Neła-r ʕurus mec b-iy-x-ānu.
DEM.nI-LAT Russian language.ABS.III III-know-PRS-NEG
'She does not know the Russian language.'
(213) [Q'ˁim-ä q'ˁim-e-s mec b-iy-r-ani-x]
own-OS-GEN1 language.ABS.III III-know-CAUS-MASD-AD.ESS
ħažetaw šebin (yoł).
important thing.ABS.IV be.PRS
'It is important to know one's own language.' (=(3) above)

Similarly, (214) may be a statement about an accidental encounter, while in (215) the implication is that an intentional effort is being made.

(214) Dä-r ža uži ged-mo-x-or Ø-iy-s.
1SG-LAT DEM boy.ABS.I garment-OS-AD-LAT I-know-PST.WIT
'I recognized (knew) that boy by his shirt.'
(215) Aħ-ä nesi-s bˁeƛ'ƛ'u šila-za-x-or
shepherd-ERG DEM.I-GEN sheep(.SG).ABS.III horn-PL.OS-AD-LAT
b-iy-r-si.
III-know-CAUS-PST.WIT
'The shepherd recognized (knew) his sheep by its horns.'

6.4.2. Ditransitivization of cognition/perception verbs

In the second pattern of causativization of cognition/perception verbs, a new participant is introduced as the causer, creating a three-place predicate. Consider the causative of *–et*- 'like, want'; causativization adds a causer, the experiencer becomes the causee in the poss-essive, and the stimulus remains in the absolutive. To represent this schematically:

(216) affective: Experiencer-LAT Stimulus-ABS V
causative Agent-ERG Causee-POSS-ESS Stimulus-ABS V-CAUS

Consider the causativization of AGR-*et*- 'like; love; want':

(217) a. Debe-r čorpa b-eti-x-ānu.
2SG-LAT soup.ABS.IV IV-like-PRS-NEG
'You don't like (the) soup.'

b. Eni-y-ä debe-q yedu čorpa b-et-ir-xo.
mother-OS-ERG 2SG-POSS.ESS DEM.nI soup.ABS.IV IV-like-CAUS-PRS
'The mother is making/will make you like this soup.'

Likewise, the causative of AGR-*ukad*- 'see (be visible)' is the ditransitive verb AGR-*ukar*- 'show', which we already discussed in section 4.1. Here, the agent appears in the ergative, the recipient-turned-causee appears in the poss-essive, and the absolutive encodes the stimulus/patient.

The same causativization pattern can be found with complex verbs of cognition/perception. Compare the intransitive verb *bič'zi* AGR-*oq*- 'be clear, be understood' and its transitive counterpart *bič'zi* AGR-*od*- 'make clear, explain':

(218) (kid-be-q) sual bič'zi b-oq-x-ānu.
girl-OS-POSS.ESS question.ABS.III understand III-become-PRS-NEG
'The question was not understood.'//'The girl does not understand the question.'

(219) Učitel-ä (kid-be-q) sual bič'zi
teacher-ERG girl-OS-POSS.ESS question.ABS.III understand
b-oy-s.
III-do-PST.WIT
'The teacher explained the question (to the girl).'

Note that finer semantic distinctions within the class of cognition/perception verbs do not predict which of the two patterns of causativization will occur. The verb 'like' causativizes using the schema in (216), and verb 'dislike' uses the opposite pattern, (206); causativization turns the verb of seeing into a ditransitive, and the other four sense verbs into transitives.

The differences among the causativization patterns of cognition/perception verbs opens up larger questions concerning both the underlying structural differences among these verbs and the grammatical functions of the experiencer and stimulus in the affective construction. We have already mentioned that the verbs appearing in the affective construction seem intransitive, and the lative noun phrase can be easily omitted. However, the argument structure of a verb like 'be known' or 'be visible' presupposes not only the stimulus but also the experiencer of knowledge or sight. This being the case, the lative noun phrase can express either an argument or what some researchers call an obligatory adjunct (cf. Grimshaw and Vikner 1993; Golberg and Ackerman 2001). Assuming that both noun phrases, the lative and the absolutive, are obligatory in the affective construction, the next question is which of these phrases (if either) acts as the subject. There are several possibilities: the lative is the subject and the absolutive the object; the absolutive is the subject and the lative is the (indirect) object; neither noun phrase is the subject.

We find that the difference in causativization corresponds to additional differences in at least three other domains. The first has to do with reflexivization. The details are given in CH. YY [Reflexives and anaphora], but in a nutshell, verbs which causativize into transitives (section

6.4.1—we will refer to them as 'know'-verbs) have the lative argument binding the absolutive but not vice versa, and verbs that causativize into ditransitives (section 6.4.2—we will refer to them as 'like'-verbs) allow binding both ways, from the lative to the absolutive and vice versa. Another area of divergence between the two types of cognition/perception verbs has to do with coreference across clauses, in particular between a pronominal or demonstrative antecedent and the emphatic particle *–tow* (CH.YY [Reflexives and anaphora]). The lative experiencer of 'know'-verbs has priority over the absolutive in determining coreference across clauses; with 'like'-verbs, both noun phrases seem to have equal access to such coreference (see CH. YY [Reflexives and anaphora]). Finally, the two classes of cognition/perception verbs differ with respect to formation of masdar relative clauses (CH. YY [Relative clauses]). With 'know'-verbs, only the absolutive argument can be relativized with a masdar clause; with 'like'-verbs, both the absolutive and the lative can produce masdar relatives.

A summary of the differences between the two types is given in Table 1.

Table 1. Structural differences across cognition/perception verbs

	Causativization	Reflexive binding	Coreference across clauses	Relativization with masdar relative clause
'know', 'hear', 'feel, 'forget', 'find', 'dislike'	Creates transitive volitional verbs with experiencer as ergative argument	LAT binds ABS; *ABS binds LAT	LAT has priority over ABS	*LAT ABS
'see', 'like/love/want'	Creates ditransitive verbs with experiencer mapping to causee; adds a causer argument	LAT binds ABS; ABS binds LAT	LAT and ABS are equal in maintaining coreference	LAT ABS

Independent evidence shows that masdar relative clauses can relativize on any argument except the highest one; for instance, ergative noun phrases and absolutive subjects cannot relativize this way (CH. YY [Relative clauses]). This observation suggests an explanation for the differences between 'know'-verbs and 'like'-verbs. With 'know'-verbs, the lative noun phrase appears to be a non-canonical subject (as has been observed with subjects of cognition/perception verbs across a number of languages; cf. Croft 1993, Blake 2001, Butt 2006 for a discussion, and see Pylkkänen 1999 for a similar pattern in Finnish). Evidence from other clause types demonstrates independently that Tsez subjects cannot be reflexive (see CH. YY [Reflexives and anaphora]), so the asymmetrical reflexivization observed with 'know'-verbs follows if the lative is a subject. Finally, since Tsez is an "intransitive language", where the causative pattern (deriving transitive verbs from intransitive) is more prevalent than the anticausative pattern (deriving intransitive verbs from transitive; commonly found in Romance or Slavic), the causativization of non-volitional verbs as volitional transitives is part of the larger pattern.

To represent the structure of ‘know’-verbs schematically, let us revisit the sentence (207a), repeated below:

(220) Aħoˁ-r meši b-esu-s.
shepherd-LAT calf.ABS.III III-find-PST.WIT
NON-CANONICAL SUBJECT OBJECT

With ‘like’-verbs, the lative argument is not a subject; it is a structurally prominent additional argument of an unaccusative predicate, added through a process akin to applicativization. Such predicates have been described as applicative unaccusatives (see Režać 2008 for the term and for the analysis of the Basque *gustatu* ‘like’), and their experiencer arguments as “i-nominals” (the term from Moore and Perlmutter 2000). Applicative unaccusatives have two schematic realizations. In the schema shown in (221a), they have an expletive subject, and the internal argument of the verb appears in its base position. In this realization, the applied (indirect) object is higher than the base object and can bind it. Alternatively, in the schema shown in (221b), the internal argument of the applicative unaccusative raises to the subject position, in which case it is now higher than the lative object and can bind it. This results in the appearance of symmetrical reflexivization in clauses with ‘like’-verbs.

(221) a. *expl* debe-r čorpa b-eti-x-ānu.
2SG-LAT soup.ABS.IV IV-like-PRS-NEG
SUBJECT APPLIED OBJECT BASE OBJECT

b. čorpa debe-r b-eti-x-ānu.
soup.ABS.IV 2SG-LAT IV-like-PRS-NEG
SUBJECT APPLIED OBJECT

6.4.3. ‘Fear’/‘frighten’

Recall that the verb AGR-*uƛ’* ‘fear; be afraid’, although semantically a psychological state verb, is structurally a regular intransitive. Its experiencer appears in the absolutive and its stimulus in the super-essive:

(222) [Yedu kid] [meži-z ɣ$^{w\varsigma}$ay-q] y-uƛ’-xo.
DEM girl.ABS.II 2PL-GEN2 dog-OS-POSS.ESS II-fear-PRS
EXPERIENCER STIMULUS
‘This girl is afraid of your dog.’ (lit.: fears on your dog)

Accordingly, AGR-*uƛ’* is causitivized following the intransitive pattern, with the absolutive experiencer corresponding to the absolutive causee of the transitive verb AGR-*uƛ’-er-* ‘frighten’ and the ergative causer denoting the source of fear. Causative verbal forms are ambiguous between direct and indirect causation; these interpretations are distinguished contextually. Therefore, it is possible to find ‘frighten’ expressing both direct and indirect events of making someone scared:

(223) a. Meži-z ɣ$^{w\varsigma}$ay-ä kid y-uƛ’-er-xo.
2PL-GEN2 dog-ERG girl.ABS.II II-fear-CAUS-PRS
‘Your dog frightens the girl.’

b. Xexbi (aždaħo-za-q) r-uƛ’-er-xo
children.ABS.nIPL dragon-PL.OS-POSS.ESS nIPL-fear-CAUS-PRS
eniw=babi-y-ä.
parents-OS-ERG
‘Parents frighten children (with dragons).’

7. Biabsolutive construction

In the biabsolutive construction, the two core arguments, corresponding to the ergative and the absolutive of a transitive or ditransitive verb, both occur in the absolutive form. This change in case marking is accompanied by changes in agreement, which we show below. Two main biabsolutive patterns are observed; in one, the predicate consists of the imperfective converb with the auxiliary ‘be’, and in the other, the predicate includes the imperfective converb, the resultative participle of the verb AGR-*ič*- ‘stay’, and the auxiliary ‘be’.[21] Compare the ergative construction in (224) with its biabsolutive counterparts:

(224) Už-ä aħo y-eč’-xo (yoł/zow-s).
boy-ERG tree.ABS.II II-cut-IPFV.CVB AUX.PRS/AUX.PST-PST.WIT
‘The boy is/was cutting a/the tree.’

(225) Uži aħo y-eč’-xo (yoł/zow-s).
boy.ABS.I tree.ABS.II II-cut-IPFV.CVB AUX.PRS/AUX.PST-PST.WIT
‘The boy is/was cutting a/the tree.’

(226) Uži aħo y-eč’-xo/*Ø-eč’-xo Ø-ič-äsi/*y-ič-äsi
boy.ABS.I tree.ABS.II II-cut-IPFV.CVB /I-cut- IPFV.CVB I-stay-RES/II-stay-RES
(yoł/zow-s).
AUX.PRS/AUX.PST-PST.WIT
‘The boy is/was (in the state of) cutting a/the tree.’

In the discussion below, we will be referring to the *uži*-type noun phrase in (225) and (226) as the “agent absolutive,” and to the *aħo*-type noun phrase as the “patient absolutive.”

Since auxiliaries are freely omitted in root clauses (as we indicate by putting them in parentheses in (225) and (226)), the difference between the ergative construction and the biabsolutive in (225) is just in the case marking of the agent argument. In (226), the difference in agreement becomes apparent, however; the notional verb ‘cut’ agrees with the patient ‘tree’ but the resultative participle of the verb AGR-*ič*- ‘stay’ agrees with the agent. Alternative agreement is impossible, as indicated in the examples above.

[21] The contrast between transitive ergative constructions and biabsolutive (or binominative) constructions is quite common in Nakh-Dagestanian languages (see Kibrik 1975 for one of the earliest discussions, Forker 2012 for an overview, and Gagliardi et al. 2014 for a detailed syntactic analysis).

The biabsolutive construction is optional and alternates with the ergative construction. Possibly as a result of this alternation, it is rather rare, despite the fact that its building blocks (the converb and the resultative participle) are actually quite common in spoken language and in narrative texts. When the biabsolutive is used, its interpretation includes two salient components. First, the construction is interpreted as progressive or durative, and for the subtype with AGR-*ič-äsi,* as indicating a continous state. Indeed, we find that the biabsolutive construction is natural with such adverbs as 'still', 'already', 'all the time', but is judged as infelicitous in the presence of 'sometimes':

(227) Kid žäd ħak'o b-oy-x y-ič-äsi yoł.
girl.ABS.II still xinkal.ABS.III III-do-IPFV.CVB II-stay-RES AUX.PRS
'The girl is still busy making dumplings.'

(228) #Uži sosit'a/zama=zamanyox aħo y-eč'-xo
boy.ABS.I sometimes/from.time.to.time tree.ABS.II II-cut IPFV.CVB
Ø-ič-äsi zow-s.
I-stay-RES AUX.PST-PST.WIT
('The boy was sometimes cutting a/the tree.')

The second meaning component of the biabsolutive construction is an emphasis on the state of the agent participant; speakers suggest that the agent is somehow foregrounded and the agent's involvement in the event is particularly noticeable. Similar observations concerning the emphasis on the agent have been made for biabsolutive constructions in other Nakh-Dagestanian languages (Kazenin 1998; Forker 2012); Forker (2012) refers to such emphasis as "agent focusing".

The foregrounding of the agent referent goes hand-in-hand with the perception of the agent as affected by the ongoing state of affairs denoted by the construction. Because these auxiliary constructions have a clear aspectual reading, it is also possible to imagine that they should be possible with intransitive verbs, but identifying biabsolutive constructions based on intransitives is more difficult because the subject does not change its case marking. Further evidence that the biabsolutive construction generally emphasizes the state of the agent comes from manner adverbials. In the biabsolutive construction, manner adverbials describing the way an event develops can only refer to the event expressed by the converb; meanwhile outside that construction, manner adverbials can modify any predicate. Consider the following example, where the agreeing adverb 'fast' can apply to the manner of the letter-reading but not to the father's state:

(229) a. Debi babiw y-ˢaƛo/*Ø-ˢaƛo kaɣat t'et'er-xo
2SG.GEN1 father.ABS.I II-fast/I-fast letter.ABS.II read-IPFV.CVB
Ø-ič-äsi zow-s.
I-stay-RES AUX.PST-PST.WIT
b. Debi babiw kaɣat y-ˢaƛo/*Ø-ˢaƛo t'et'er-xo
2SG.GEN1 father.ABS.I letter.ABS.II II-fast/I-fast read-IPFV.CVB
Ø-ič-äsi zow-s.
I-stay-RES AUX.PST-PST.WIT
'Your father was engaged in quickly reading a/the letter.'

In contrast, the agreeing adverb ‘already’ can relate to either of the subevents, but with different interpretations:

(230) a. Debi babiw Ø-uygon kaɣat t’et’er-xo
2SG.GEN1 father.ABS.I I-already letter.ABS.II read-IPFV.CVB
Ø-ič-äsi zow-s.
I-stay-RES AUX.PST-PST.WIT
‘Your father was already engaged in reading a/the letter.’ (“already” refers to the state of being engaged)

b. Debi babiw y-uygon kaɣat t’et’er-xo
2SG.GEN1 father.ABS.I II-already letter.ABS.II read-IPFV.CVB
Ø-ič-äsi zow-s.
I-stay-RES AUX.PST-PST.WIT
‘Your father was engaged in already reading a/the letter.’ (“already” refers to the event of reading)

In addition to its agreement and case marking properties, the biabsolutive construction has more rigid word order than its ergative counterpart. While all six orders of subject, object, and verb are possible in (224), in the biabsolutive construction, the object cannot follow the verb and cannot appear directly before the subject on the same side of the verb:

(231) a. Uži ałho y-eč’-xo yoł/zow-s. [SOV]
boy.ABS.I tree.ABS.II II-cut-IPFV.CVB AUX.PRS/AUX.PST-PST.WIT

b. Ałho y-eč’-xo yoł/zow-s uži. [OVS]
tree.ABS.II II-cut-IPFV.CVB AUX.PRS/AUX.PST-PST.WIT boy.ABS.I
‘The boy is/was cutting a/the tree.’

c. *Ałho uži y-eč’-xo yoł/zow-s. [*OSV]
tree.ABS.II boy.ABS.I II-cut-IPFV.CVB AUX.PRS/AUX.PST-PST.WIT

d. *Y-eč’-xo yoł/zow-s ałho uži. [*VOS]
II-cut- IPFV.CVB AUX.PRS/AUX.PST-PST.WIT tree.ABS.II boy.ABS.I

e. *Y-eč’-xo yoł/zow-s uži ałho. [*VSO]
II-cut- IPFV.CVB AUX.PRS/AUX.PST-PST.WIT boy.ABS.I tree.ABS.II

f. *Uži y-eč’-xo yoł/zow-s ałho. [*SVO]
boy.ABS.I II-cut-IPFV.CVB AUX.PRS/AUX.PST-PST.WIT tree.ABS.II

Although the object cannot precede the subject absolutive in OSV order and cannot follow the verb altogether, it can be separated from the verb, as we see in example (229b).

Inanimate agents are impossible in the biabsolutive construction; compare the ergative construction in (76), repeated below (with irrelevant glossing details omitted), and its ungrammatical biabsolutive counterpart:

(232) C’i-d-ä ʕaˤɣur y-ikur-xo.
fire-ERG mill.ABS.II II-burn-PRS
‘Fire burns the mill.’

(233) *C'i ʕaˤɣur y-ikur-xo yoł.
fire.ABS mill.ABS.II II-burn-IPFV.CVB AUX.PRS
('Fire is burning the mill.)

Inadvertent agents and experiencers are also impossible in the biabsolutive construction; thus, cognition/perception verbs such as those discussed in section 5 do not appear in this construction:

(234) Madina-r [gagali-s maħ] b-iy-x.
Madina-LAT flower-GEN1 smell.ABS.III III-know-PRS
'Madina smells flowers.'
(235) *Madina [gagali-s maħ] b-iy-xo y-ič-äsi yoł.
Madina.ABS.II flower-GEN1 smell.ABS.III III-know-IPFV.CVB II-stay-RES AUX.PRS
('Madina is smelling flowers.')

There is one exception to the ban on experiencers in the biabsolutive construction, in the case of the verb AGR-*et*- 'love, like, want'. This verb can appear in the biabsolutive construction, but only with a highly restricted meaning. While (236) is ambiguous out of context, the biabsolutive construction in (237) can have only the meaning 'want', but not 'like' or 'love':

(236) Xex-za-r sayɣat b-eti-x yoł.
child-OS-LAT gift.ABS.III III-want-IPFV.CVB AUX.PRS
'Children like/want a/the gift.'
(237) Xex-bi sayɣat b-eti-x r-ič-äsi yoł.
child-ABS(.nIPL) gift.ABS.III III-want-IPFV.CVB nIPL-stay-RES AUX.PRS
'Children want (are wanting) a gift.'

One could argue that liking something is a less volitional process than wanting something; that would account for the data in (237). Based on this data point and the fact that only animate agents are allowed in the biabsolutive construction, we can conclude that the agent of this construction must be volitional.

As long as the restrictions on the semantics of the agent are met, both transitive and ditransitive verbs, and even polytransitive causatives, can appear in the biabsolutive construction. For example,

(238) Učitel-bi xex-za-q kino r-uka-r-xo
teacher-PL.ABS.IPL child-OS-POSS.ESS movie.ABS.IV IV-see-CAUS-IPFV.CVB
b-ič-äsi zow-s.
IPL-stay-RES AUX.ST-PST.WIT
'The teachers were showing the children a movie.'

The agent absolutive in both biabsolutive structures can be replaced with a wh-word and appear with the topic particles *–no* and *–gon.* It can also undergo relativization, although relative clauses formed from the biabsolutive construction without *-ičäsi* are indistinguishable from relative

clauses formed from the corresponding ergative construction (thus, examples (239b) and (240b) have the same form):

(239)) a. Už-ä ađo y-eč'-xo zow-s.
boy-ERG tree.ABS.II II-cut-IPFV.CVB AUX.PST-PST.WIT
'The boy was cutting a/the tree.'

b. [ađo y-eč'-xo zāw-ru] uži
tree.ABS.II II-cut-IPFV.CVB AUX.PST-PST.PTCP boy
'the boy who was cutting a/the tree'

(240) a. Uži ađo y-eč'-xo zow-s.
boy.ABS.I tree.ABS.II II-cut-IPFV.CVB AUX.PST-PST.WIT
'The boy was cutting a/the tree.'

b. [ađo y-eč'-xo zāw-ru] uži
tree.ABS.II II-cut-IPFV.CVB AUX.PST-PST.PTCP boy
'the boy who was cutting a/the tree'

(241) a. Uži ađo y-eč'-xo Ø-ič-äsi
boy.ABS.I tree.ABS.II II-cut-IPFV.CVB I-stay-RES
zow-s.
AUX.PST-PST.WIT
'The boy was (in the state of) cutting a/the tree.'

b. [ađo y-eč'-xo Ø-ič-äsi zāw-ru] uži
tree.ABS.II II-cut-IPFV.CVB I-stay-RES AUX.PST-PST.PTCP boy
'the boy who was (in the state of) cutting a/the tree'

So far, we have described both types of the biabsolutive construction together. However, they also demonstrate some differences, particularly with respect to wh-question formation, topic marking, and adverb placement.

In the biabsolutive construction without the resultative participle, the patient absolutive can be replaced with a wh-word, can undergo relativization, and can appear with topic particles. For example:

(242) a. Uži šebi r-eč'-xo zow-ä?
boy.ABS.I what.ABS.IV IV-cut-IPFV.CVB AUX .PST-PST.WIT.INTERR
'What was the boy cutting?'

b. [uži y-eč'-xo zāw-ru] ađo
boy.ABS.I II-cut-IPFV.CVB AUX.PST-PST.PTCP tree
'the tree that the boy was cutting'

In the biabsolutive construction with the resultative participle, the absolutive patient cannot be replaced with a wh-word, cannot undergo relativization and cannot appear with topic particles. To illustrate:[22]

[22] Example (243a) is acceptable as an echo question: "The boy was busy cutting WHAT?" Evidence for the "echo" nature of this question comes from word order. Unlike regular questions,

(243) a. *Uži šebi r-eč'-xo Ø-ič-äsi zow-ä?
boy.ABS.I what.ABS.IV IV-cut-IPFV.CVB I-stay-RES AUX.PST-PST.WIT.INTERR
('What was the boy cutting?')
b. *[uži y-eč'-xo Ø-ič-äsi zāw-ru] aħo
boy.ABS.I II-cut-IPFV.CVB I-stay-RES AUX.PST-PST.PTCP tree
('the tree that the boy was (in the state of) cutting')
c. *Uži a ħo-gon y-eč'-xo Ø-ič-äsi
boy.ABS.I tree.ABS.II-CONTR.TOP IV-cut-IPFV.CVB I-stay-RES
zow-s.
AUX.PST-PST.WIT
('As for the tree, the boy was cutting it.')

Finally, the two constructions differ with respect to adverbial scope and placement. Consider the behavior of an agreeing adverbial such as AGR-*uygon* 'already', which was introduced in (230) above. We repeat the examples from (230) below, modified to show the possible omission of the resultative participle.

(244) a. Debi babiw Ø-uygon kaɣat t'et'er-xo
2SG.GEN1 father.ABS.I I-already letter.ABS.II read-IPFV.CVB
(Ø-ič-äsi) zow-s.
I-stay-RES AUX.PST-PST.WIT
'Your father was already engaged in reading a/the letter.'
b. Debi babiw y-uygon kaɣat t'et'er-xo
2SG.GEN1 father.ABS.I II-already letter.ABS.II read-IPFV.CVB
(Ø-ič-äsi) zow-s.
I-stay-RES AUX.PST-PST.WIT
'Your father was engaged in already reading a/the letter.'

As (244) shows, in both biabsolutive subtypes, the agreeing adverbial can precede the absolutive patient and can agree with either the agent or patient. However, if the same adverb appears between the absolutive patient and the verb, a distinction emerges: both agreements are still possible in the biabsolutive construction without the resultative participle, but only agreement with the patient is possible in the construction with the resultative participle:

(245) a. Kaɣat y-uygon/Ø-uygon t'et'er-xo zow-s
letter.ABS.II II-already/I-already read-IPFV.CVB AUX.PST-PST.WIT
debi babiw.

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the wh-word in echo-questions can appear postverbally (see CH. YY [Interrog] for regular versus echo questions), and a variation on (243a) with a postverbal wh-word is also possible:

(i) Uži r-eč'-xo Ø-ič-äsi zow-ä šebi?
boy.ABS.I IV-cut-IPFV.CVB I-stay-RES AUX.PST-PST.WIT.INTERR what.ABS.IV
'WHAT was the boy cutting?'

2SG.GEN1 father.ABS.I
'Your father was already engaged in reading a/the letter.'
'Your father was engaged in already reading a/the letter.'

b. Kaɣat y-uygon/*Ø-uygon t'et'er-xo Ø-ič-äsi
letter.ABS.II II-already/I-already read-IPFV.CVB I-stay-RES
zow-s debi babiw.
AUX.PST-PST.WIT 2SG.GEN1 father.ABS.I
'Your father was engaged in already reading a/the letter.'
NOT: 'Your father was already engaged in reading a/the letter.'

These differences suggest that the biabsolutive construction without the resultative participle is monoclausal; the combination of the converb and the auxiliary creates a complex verb form with a dedicated aspectual meaning (see Comrie 2000a for further discussion). An adverb that agrees with either of the absolutives is free to find a place anywhere in that monoclausal structure.

The biabsolutive construction with the resultative participle, by contrast, has two separate clausal domains, one containing the absolutive patient and the converb, the other containing the absolutive agent and the resultative form. For clarity, we represent these domains schematically using the order OVS:

(246) a. [[ABS-patient V-CVB] stay-RES AUX ABS-Agent]
LOWER DOMAIN HIGHER DOMAIN

b. [[kaɣat t'et'er-xo] Ø-ič-äsi yoł debi babiw]
letter.ABS.II read-IPFV.CVB I-stay-RES AUX.PRS 2SG.GEN1 father.ABS.I

Here, the absolutive patient is in the embedded structure, from where it is inaccessible to relativization and question formation. This embedded clause can take its own adverbial scope, separate from the adverbial scope of the higher clause (see Gagliardi et al. 2014 for a detailed syntactic analysis). Other researchers have suggested that different syntactic structures may correspond to otherwise similar constructions. For example, Harris and Campbell (1995: section 7.4.3) discuss two biabsolutive constructions in Avar, suggesting that one is monoclausal, while the other may not be. Harris and Campbell's discussion suggests that there are other biabsolutive "types" in the Nakh-Dagestanian family as well. If so, it may be useful to investigate diachronic pathways from one structure to the other: should one expect the development of a monoclausal structure from a biclausal one, or vice versa? What might trigger such a development?

8. Summary

This chapter presented the main argument structure types for Tsez verbs and introduced the main types of clauses formed by such verbs. By way of summary, we present the clauses discussed above in a table.

Table 2. Main clause types in Tsez

Clause type	**Predicate**	**Core constituents**

“Impersonal”	Unaccusative intransitive verb	ABS argument
Copular	Predicative complement (nominal, noun phrase, non-finite verb forms, adverb, PP, adjective) and auxiliary verb	ABS argument
Existential proper	‘be’, ‘become’	ABS pivot, adverbial scene-setting expression
Possessive existential	‘be’, ‘become’, ‘appear’	ABS pivot, GEN or POSS-ESS possessor
All other intransitive clauses	Any intransitive verb	ABS argument
Accidental construction	Intransitive	ABS patient, POSS-ESS inadvertent agent
Affective construction	Intransitive verb expressing psychological or cognitive state	ABS stimulus, LAT experiencer
Ergative construction	Transitive or ditransitive verb (including causative of intransitive)	ERG agent, ABS patient
Potential construction	Transitive or ditransitive verb in the potential form	POSS-ESS agent, ABS patient
Ditransitive construction	Ditransitive verb (excluding causatives of transitives)	ERG agent (POSS-ESS agent), ABS patient, Recipient/Goal in a lexically specified spatial form (LAT, POSS-LAT)
Ditransitive construction	Causative of transitive	ERG causer, ABS patient, POSS-ESS causee

Questions

Tsez questions are constructed using the general interrogative marker *-(y)ä*, the distribution of which is subject to phonological rules (see CH. YY). If combining with a verb in any affirmative form other than the witnessed past, the suffix can often be omitted, in which case the question interpretation must be inferred from prosody and general context.

1 Yes-no questions

1.1 Matrix clause yes-no questions

Yes-no (polar) questions are formed by adding the interrogative suffix to the questioned constituent. In a neutral yes-no question (asking whether the proposition is true or not), the interrogative appears on the finite verb, as shown in the following examples. In forms other than the witnessed past, the interrogative marking is optional (as shown in (1) and (2)), and the difference between declaratives and interrogatives can be expressed by intonation alone, with interrogatives associated with the rising contour (more on that below).

(1) Qema r-egir-xo/r-egir-x-ä?
rain.ABS.IV IV-send-PRS/IV-send-PRS-INTERR
'Is it raining?'

(2) B-ukay-x(-ä) elo-s bitay qala?
III-see-PRS-INTERR there-GEN1 far.away fortress.ABS.III
'Do you see the fortress over there?' (ʕAliqilič:114)

(3) Yoł-ä mežu-ł teł yiła gulu-λ'
be.PRS-INTERR 2PL-CONT.ESS among DEM.nI.OS horse-SUPER.ESS
zow-ani-x bažari yoł-äsi žek'u?
climb-MASD-AD.ESS capability.ABS.III be-RES person.ABS.I
'Is there a man among you who has the ability to ride this horse?' (Qacis gulu:19)

If the predicate is expressed by a complex verb, the interrogative marker appears on the finite part of the predicate, thus:

(4) Mi di y-ow-a yoł-ä?
2SG.ERG 1SG.ABS(.II) II-take-INF be.PRS-INTERR
'Are you going to take me as your wife?' (Qacis gulu:11)

(5) Dä-q aq'ˤlu moˤłi-xosi Ø-oq-ä mi?
1SG-POSS.ESS sense.ABS.III teach-PRS.PTCP I-become-INTERR 2SG.ABS(.I)
'Are you here to teach me?'

(6) Dey gulu b-et'u-n koλ'-ä?
1SG.GEN1 horse.ABS.III III-tear.away-PFV.CVB run-PST.WIT.INTERR
'Did your horse gallop?'

In negative polar questions, the interrogative suffix follows negation. Again, except in the witnessed past, the interrogative marker is often omitted:

(7) Dey ħumukuli b-ukay-nč'-ä?
1SG.GEN1 camel.ABS.III III-see-PST.NEG-INTERR
'Haven't (you) seen my camel?'

(8) Neło-s ħažat ānu/an-ä debe-r?
DEM.nI-GEN1 necessity/ABS.IV be.PRS.NEG/be.PRS.NEG-INTERR 2SG-LAT
'Don't you need that?' (lit.: is there not its necessity to you?)

If a clause includes the validator adverbial AGR-*uy* 'indeed, certainly' (see CH. YY [Adverbial phrase] and CH. YY [Particles]), the interrogative marker attaches to it, and the general interpretation of the question is the same as if it were on the verb. The following questions, with the intransitive verb AGR-*oƛ*- (whose absolutive subject is presupposed but not expressed) are truth-conditionally equivalent:[1]

(9) a. Debi r-uy-ä r-oƛ-xo?
2SG.GEN1 IV-indeed-INTERR IV-hurt-PRS
'Are you ill?' (Bašiqʿoy:32)

b. Debi r-oƛ-x-ä?
2SG.GEN1 IV-hurt-PRS-INTERR
'Are you ill?'

If the interrogative suffix appears on a constituent other than the finite form of the predicate, that constituent is in focus. The interrogative suffix cannot be omitted in such questions. There is no difference in finiteness between questions with the focus on the predicate and questions with the focus on some other constituent. In that respect, Tsez is different from some other languages of the family, where non-predicate polar questions require that the main verb appear in a non-finite form (see Kibrik 1999: 453-455 for Tsaxur).

Compare (2), which questions the ability of the addressee to see the fortress, and (10), where the goal is to ascertain whether the object in sight is a fortress or not:[2]

(10) B-ukay-x elo-s bitay qala-yä?
III-see-PRS there-GEN1 far.away fortress.ABS.III-INTERR
'Is it the fortress over there that you see?'

Likewise, compare (1), which is an information question about the weather, and (11), where the question pertains to the type of precipitation that is falling from the sky.

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[1] If AGR-*uy* is present in a clause, the interrogative marker typically combines with it. The

(i) ??/*Debi r-uy r-oƛ-x-ä?
2SG.GEN1 IV-indeed IV-hurt-PRS-INTERR
('Are you ill?')

[2] Yes-no questions of this kind are often translated into English as clefts, but there is no cleft structure in the original.

(11) Qema-yä r-egir-xo?
rain.ABS.IV-INTERR IV-send-PRS
'Is it rain that is falling?'

If a constituent inside a complex verb is questioned, only that part is in focus. For example, in (12), the focus is on teaching:

(12) Dä-q aq'ˤlu moˤłi-xosi-yä Ø-oqno mi?
1SG-POSS.ESS sense.ABS.III teach-PRS.PTCP-INTERR I-become-INTERR 2SG.ABS(.I)
'Is it to teach me that you are here?'

In (13), the question asked is not whether the glove is or is not special, but about the degree to which it is different from all other gloves:

(13) Ža debi reƛ'iqoy bat'iyaw-tow-ä r-ič-a r-āy-x?
DEM 2SG.GEN1 glove.ABS.IV different-FOC-INTERR IV-stay-INF IV-must-PRS
'This glove of yours must be really special, mustn't it?' (lit. is it really special that your glove must be) (Xanes łˤono u žin, sis kidno:30)

As examples (12) and (13) indicate, the focus of a yes-no question can also be on a subconstituent. To illustrate further, compare the following examples. In (14), the question is about the event of bringing wet firewood. In (15), the focus of the question is on the agent (whether the one that brought the wet firewood was the rooster or not), and in (16), the focus is on the object (whether what the rooster brought in was wet firewood or not). In (17), however, the focus is on a subconstituent of the noun phrase: did the rooster bring wet firewood, or dry firewood?

(14) Mamalay-ä at'iw-t'a qaca r-ay-r-ä?
rooster-ERG wet-DISTR firewood.ABS.IV IV-come-CAUS-PST.WIT.INTERR
'Did he regularly bring wet firewood?' (based on Onočun mamalayn:4)

(15) Mamalay-ä-yä at'iw-t'a qaca r-ay-r-si?
rooster-ERG-INTERR wet-DISTR firewood.ABS.IV IV-come-CAUS-PST.WIT
'Was it the rooster that regularly brought wet firewood?'

(16) Mamalay-ä at'iw-t'a qaca-yä r-ay-r-si?
rooster-ERG wet-DISTR firewood.ABS.IV-INTERR IV-come-CAUS-PST.WIT
'Was it wet firewood that the rooster regularly brought?'

(17) Mamalay-ä at'iw-t'a-yä qaca r-ay-r-si?
rooster-ERG wet-DISTR-INTERR firewood.ABS.IV IV-come-CAUS-PST.WIT
'Is it true of the firewood that the rooster regularly brought that it was wet?'

In the next two sentences, the yes-no question is either about the entire event (18), or about the manner of that event (19); in the latter case, the interrogative marker appears on the adverb:

(18) Ža durimoƛ' Ø-ay-ä?

DEM.ABS(.I) by.running I-come-PST.WIT.INTERR
'Did he come running?'

(19) Ža durimoƛ'-ä Ø-ay-si?
DEM.ABS(.I) by.running-INTERR I-come-PST.WIT
'Was it hastily (lit.: in running) that he came?'

Most subconstituents can be the focus of yes-no questions, but we find at least two exceptions. First, the interrogative is considered unacceptable on the genitive in measure phrases. Normally adnominal genitives can combine with the interrogative marker, so measure phrases clearly stand out in that regard.[3,4]

(20) Qema-s axu-yä q'ˤida-r y-ay-x?
rain-GEN1 drop.ABS.II-INTERR down-LAT II-come-PRS
'Is it a drop of rain that fell?'

(21) #Qema-s-ä axu q'ˤida-r y-ay-x?
rain-GEN1-INTERR drop.ABS.II down-LAT II-come-PRS
('Is it rain that a drop of fell?')

Next, the placement of the interrogative marker on constituents of light verbs is often judged awkward, as shown by the next two examples:

(22) #Nes-ä elu-r ħurmat-ä b-oy-x?
1SG.GEN1-INTERR 1PL-LAT respect.ABS.III-INTERR III-do-PRS
'Is it respect that he is showing us?'

(23) #Eniw debe-ƛ' ƛ'irāy-ä y-oq-no?
mother.ABS.II 2SG-SUPER.ESS from.above-INTERR II-become-PST.nWIT
'Did mother forgive you?'

The examples presented so far also show that the word order in root polar questions is completely free and is not different in any way from the word order in declaratives. However, one may notice that the interrogative marker that attaches to non-verbal constituents appears only in the preverbal domain. This is not accidental. Postverbal material is generally interpreted as backgrounded, given information, and that information-structural status is incompatible with the focusing associated with questions. As we will show below, genuine (non-reprisal) wh-words are also impossible in the postverbal position. Interrogative markers observed in postverbal position of what look like yes-no questions are a sign of exclamatives, not interrogatives proper (see CH. YY [Exclamatives]).

In terms of prosody, the focus of the yes-no question (the word combining with the interrogative particle) has a rising contour on the syllable preceding the suffix *–(y)ä* and a falling contour on –

[3] Recall that these genitives were also inaccessible to relativization, even with resumption (see CH. YY [Relative clauses]).

[4] We mark the unacceptable examples as # because it is unclear whether they are judged ungrammatical or infelicitous.

(y)ä itself. This is similar to the pattern described for yes-no questions in Bagwali (Kibrik 2001: 47-48). In polar questions that ask whether the proposition is true or not, there is strong focal prominence on the verb, regardless of the presence of the interrogative suffix.

If a yes-no question is in the affirmative, it can be answered in several ways. First, the answer can be simply *hudu* 'yes' or *anu* 'no'. For example:

(24) A: Debi zaman yoł-ä?
2SG.GEN1 time.ABS.III be.PRS-INTERR
'Do you have time?'
B: Hudu/Anu.
'Yes./No.'

Second, it is possible to reply with the word that is the focus of a given question, in the appropriate polarity. For example, consider the answer to the question below (note that the agreement in the answer has to match the agreement in the question):

(25) A: Mež-ä ʕumru b-ig-ä b-oy-x?
2PL-ERG life.ABS.III III-well-INTERR III-do-PRS
'Do you live well?' (is it well that you live?)
B: B-ig/b-ig-ānu.
III-well/III-well-NEG
'Yes./No.'

The two answer strategies can also be combined. Finally, it is in principle possible to repeat the whole clause (with the appropriate polarity), but this is quite artificial.

In answers to a yes-no question with negative polarity, the negative answer confirms the speaker's assessment that a given eventuality does not or did not take place. In such confirming negative answers, however, the use of the particle *anu* 'no' is not allowed. For instance:

(26) A: Debe-r maroženi r-eti-x-an-ä/r-eti-x-ānu?
2SG-LAT ice.cream.ABS.IV IV-like-PRS-NEG-INTERR/IV-like-PRS-NEG
'You don't like ice cream, right?'
B: (*Anu) r-eti-x-ānu.
no IV-like-PRS-NEG
'No, I don't.'

A reply in the affirmative indicates that the listener rejects the speaker's assessment. The use of *hudu* in such replies is possible:

(27) A: Debe-r maroženi r-eti-x-an-ä/r-eti-x-ānu?
2SG-LAT ice.cream.ABS.IV IV-like-PRS-NEG-INTERR/IV-like-PRS-NEG
'You don't like ice cream, right?'

B: (Hudu) r-eti-x.

yes IV-like-PRS
'Yes I do.'

1.2 Embedded yes-no questions

Embedded yes-no questions appear with the quotative *–ƛin*. Their structure and properties are no different from those of matrix yes-no questions. The order of constituents in the question introduced by *–ƛin* remains as free as in questions in independent clauses.

In (28), the yes-no question with the interrogative on the predicate (*teƛxä*) is embedded under the verb 'say'.

(28) Tusnaq'-ä-zo uži-r teƛ-x-ä mi
jail-IN.ESS-ATTR.OS boy-LAT give-PRS-INTERR 2SG.ERG
izmu gulu-ƛ' zow-ani-r-ƛin… eƛi-n.
permission.ABS.III horse-SUPER.ESS climb-MASD-LAR-QUOT say-PST.nWIT
'(She) asked him if he gave his permission to the young man in jail to ride the horse.'
(Qacis gulu:24)

In the next example, the embedded question has negative polarity, and the reply, which confirms that the addressees did not see the camel, is also negative.

(29) Dey ħumukuli b-ukay-nč'-ä-ƛin esir-zaƛ'
1SG.GEN1 camel.ABS.III III-see-NEG-INTERR-QUOT ask-CAUSAL.I.CVB
yiz-ä b-ukay-nč'u-ƛin ot' b-is-xo.
DEM.IPL-ERG III-see-PST.WIT.NEG-QUOT refusal.ABS.III III-take-PRS
'When I asked them if they had seen my camel, they insist(ed) that they had not.'
(Xanno, nesisgon łˤono užin:85)

2 Alternative questions

Alternative questions require coordination of two or more interrogative clauses with the particles *ya…ya* or *yagi…yagi* 'either or'. The first particle in such chains can be omitted. For example:

(30) (Ya) y-ik'i-x(-ä) ya y-iči-x(-ä)?
or II-go-PRS-INTERR or II-stay-PRS-INTERR
'Are you going or staying?' (addressing a woman)

(31) (Yagi) eƛ'i-yä yeda žek'u Ø-ex-äsi, yagi
or last.year-INTERR DEM person.ABS.I I-die-RES or
žiƛbo-yä?
this.year-INTERR
'Did this man die last year or this year?' (Ečruni žek'un, ʕoloqanawni užin:30)

If the disjunction applies to predicates, the use of *ya…ya* or *yagi…yagi* is necessary, as in (30). However, if the alternatives are not expressed by the predicate, it is sufficient for each of the questioned constituents to combine with the interrogative marker, as in the following example:

(32) Howła imad-a-ł hič'č'a ixiw šebi yoł: is-ä,
DEM.nI.OS tale-OS-CONT.ESS most big who.ABS be.PRS bull-INTERR
cey-ä, t'eka-yä, aħo-yä, ziru-yä,
eagle-INTERR billy.goat-INTERR shepherd-INTERR fox-INTERR
q'orol ɣˤanabi-yä?
widowed woman-INTERR
'Who is the biggest one in this tale: The bull, the eagle, the goat, the shepherd, the fox, or the widow?' (Yizałäy hič'č'a ixiw šebi yoł?:18)

(33) Hobo-yä hik'e-yä yizi b-exu-x?
now-INTERR later-INTERR DEM.IPL IPL-die-PRS
'Are they going to die now or later?' (Qacis gulu:42)

As with yes-no questions, the syllable preceding *–(y)ä* has the rising tone, and the interrogative marker has the falling tone. There is also a prosodic boundary (probably a new onset) between the two interrogative phrases.

3 Wh-questions

Interrogative words are part of the set of indeterminate (indefinite) lexical items, which means that they can have an interrogative proper interpretation or an indefinite interpretation (for further discussion of the indefinite series, see Ch. YY[Particles]). For example, the word *šebi* 'what/who' can also mean 'something', and its interpretation depends on the nature of the clause in which it occurs.[5] Wh-words can occur in genuine information questions as well as in echo (or reprise) questions. The latter are requests for clarification, in which the speaker asks for a whole or partial repetition of the preceding (or presupposed) utterance, typically because s/he did not hear properly or understand what was said (Bolinger 1957, 1978, 1987; Blakemore 1994; Sobin 1990; Noh 1995; a.o.).

Care should be taken to distinguish the two types of questions. In what follows, we will first discuss regular wh-questions, without the echo interpretation, and then will turn to echo questions in section 3.4.

3.1 Matrix wh-questions

3.1.1 Possible interrogative structures

An interrogative phrase can generally have two positions, although the details are more fine-grained, as we show below. First, an interrogative phrase can appear in the same position as the questioned constituent (in situ), but only as long as that constituent is in the preverbal domain (35a). Next, it can appear in a clause-initial position (35b). We illustrate these options for an object wh-question based on (34):

(34) Už-ä yedu t'ek kid-be-r teƛ-si.

[5] When referring to objects, *šebi* is gender IV, as shown in glosses below. Its gender can also shift depending on context; such cases will be indicated separately.

boy-ERG DEM book.ABS.II girl-OS-LAT give-PST.WIT
'The boy gave this book to the girl.'

(35) a. Už-ä šebi kid-be-r teƛ-ä?
boy-ERG what.ABS.IV girl-OS-LAT give-PST.WIT.INTERR
b. Šebi už-ä kid-be-r teƛ-ä?
what.ABS.IV boy-ERG girl-OS-LAT give-PST.WIT.INTERR
'What did the boy give to the girl?'

Since the order in the preverbal domain is quite free, the in-situ position is not always distinguishable from an immediately preverbal position. Thus, (35a) can alternate with (36). Without further probing, it is impossible to tell if the word orders in (35a) and (36) correspond to the same baseline sentence or two different ones.

(36) Už-ä kid-be-r šebi teƛ-ä?
boy-ERG girl-OS-LAT what.ABS.IV give-PST.WIT.INTERR
'What did the boy give to the girl?'

Also, non-interrogative constituents are quite common in the postverbal domain, making it difficult to identify the actual position of a wh-word; for example, in (37), the only constituent in front of the verb is the wh-word.

(37) Šebi näƛ mi dä-r?
what.ABS give.FUT 2SG.ERG 1SG-LAT
'What will you give me?'

Barring such instances, Tsez wh-questions offer the speaker the choice between clause-initial wh-words and wh-words in situ.

Interrogative phrases corresponding to arguments are typically in situ; meanwhile, the preferred position for adjunct/adverbial interrogative expressions is clause-initial. For instance, all factors being equal, (35a) and (36) are preferred over (35b), but (38a) is preferred over (38b):

(38) a. Neti yedu šebin r-oq-ä?
when DEM thing.ABS.IV IV-become-PST.WIT.INTERR
b. Yedu šebin neti r-oq-ä?
DEM thing.ABS.IV when IV-become-PST.WIT.INTERR
'When did that happen?'

While non-interrogative constituents can freely occur after the verb (cf. (37)), interrogative phrases cannot appear post-verbally, regardless of their argument/adjunct status. Compare the grammatical declarative in (39) and the ungrammatical interrogatives in (40a-c):

(39) Už-ä teƛ-si yedu t'ek kid-be-r.
boy-ERG give-PST.WIT DEM book.ABS.II girl-OS-LAT
'The boy gave this book to the girl.'

(40) a. *Už-ä teƛ-ä šebi kid-be-r?

	boy-ERG	give-PST.WIT	what.ABS.IV	girl-OS-LAT
b.	*Už-ä	teƛ-ä	kid-be-r	šebi?
	boy-ERG	give-PST.WIT	girl-OS-LAT	what.ABS.IV
c.	*Už-ä	kid-be-r	teƛ-ä	šebi?
	boy-ERG	girl-OS-LAT	give-PST.WIT	what.ABS.IV

Multiple wh-questions within a single clause are possible, although dispreferred. Multiple fronted wh-words are ungrammatical. Thus, multiple wh-questions are only possible when one of the interrogative phrases is fronted, and the rest appear in their base positions. If the wh-phrases in a multiple wh-question are all clausal arguments, their order is determined by their hierarchical structure. For example, in (41), the ergative wh-word can appear in the clause-initial position (in which case it is impossible to tell whether it has been fronted or appears in situ), but the lative wh-word cannot precede it:

(41)	a.	Łu	t'ek	ła-r	teƛ-ä?
		who.ERG	book.ABS.II	who-LAT	give-PST.WIT.INTERR
		'Who gave the book to whom?'			
	b.	*Łā-r	łu	t'ek	teƛ-ä?
		who-LAT	who.ERG	book.ABS.II	give-PST.WIT.INTERR

Similarly, in (42), the ergative wh-word must precede the absolutive object interrogative; the opposite order is impossible:

(42)	a.	Łu	šebi	r-oy-x?
		who.ERG	what.ABS.IV	IV-do-PRS
		'Who is doing what?'		
	b.	*Šebi	łu	r-oy-x?
		what.ABS.IV	who.ERG	IV-do-PRS

In a biabsolutive construction without the resultative participle, only one argument can be questioned at a time, but that argument can be either agent or patient:[6]

(43)	a.	Eniw	šebi	r-oy-x	zow-ä?
		mother.ABS.II	what.ABS.IV	IV-do-IPFV.CVB	AUX.PST-PST.WIT.INTERR
		'What was mother making?'			
	b.	Šebi	čorpa	r-oy-x	zow-ä?
		who.ABS.I/II	soup.ABS.IV	IV-do-IPFV.CVB	AUX.PST-PST.WIT.INTERR
		'Who was making soup?'			
	c.	*Šebi	šebi	r-oy-x	zow-ä?
		who.ABS.I/II	what.ABS.IV	IV-do-IPFV.CVB	AUX.PST-PST.WIT.INTERR
		('Who was making what?')			

[6] We defer discussion of wh-questions in the biabsolutive construction with the resultative participle to section 3.1.2.

In a question with multiple wh-adjuncts, only one wh-word can be fronted:[7]

(44) a. Nā neł-ä ža neti es-ä?
where DEM.nI-ERG DEM.ABS when say-PST.WIT.INTERR
'Where and when did she say that?'
b. Neti neł-ä ža nā es-ä?
when DEM.nI-ERG DEM.ABS where say-PST.WIT.INTERR
'When and where did she say that?'
c. *Neti nā neł-ä ža es-ä?
when where DEM.nI-ERG DEM.ABS say-PST.WIT.INTERR

If a multiple wh-question has an argument and an adjunct interrogative, either of them (but not both) can appear at the clause-initial position. The fronting of an adjunct is always preferred, so (45a) is judged more favorably than (45b):

(45) a. Nā už-ä šebi t'et'er-xo?
where boy-ERG what.ABS.IV read-PRS
b. Šebi už-ä nā t'et'er-xo?
what.ABS.IV boy-ERG where read-PRS
'Where does the boy read what?'
c. *Šebi nā už-ä t'et'er-xo?
what.ABS.IV where boy-ERG read-PRS
d. *Nā šebi už-ä t'et'er-xo?
where what.ABS.IV boy-ERG read-PRS

The examples below illustrate some basic questions (note that in a number of the examples below, the actual interrogative predicate is omitted).

(46) Šebi ħal?
what state/health.ABS.III
'How are things?'

(47) Šebi debe-r r-oq-no?
what.ABS.IV 2SG-LAT IV-become-PST.nWIT
'What happened to you?'
(48) Šomo de-be-q ƛeb?

[7] Such multiple adjunct questions are judged particularly awkward, and speakers generally offer to break them into several independent questions, for example:

(i) Nā neł-ä ža es-ä? Neti
where DEM.nI-ERG DEM.ABS say-PST.WIT.INTERR when
(es-ä)?
say-PST.WIT.INTERR
'Where did she say that? When?'

how.many 2SG-OS-POSS.ESS year.ABS.II
'How old are you?'

(49) Dow-ƛ'o ci šebi?
2SG-SUPER.ESS name.ABS.III what
'What is your name?' (lit.: name on you…)

(50) Dice Ø-exora (yoł) ʕAli?
how.much I-long be.PRS Ali
'How tall is Ali?'

(51) Dice-za-ƛ' teƛ-xo?
how.much-OS-SUPER.ESS give-PRS
'How much are you asking?' (as in a sale)

(52) Łu ža r-oy-ä?
who.ERG DEM.ABS(IV) IV-do-PST.WIT.INTERR
'Who did that?'

(53) Eni-y-ä łu-r sayɣat b-is-ä?
mother-OS-ERG who-LAT gift.ABS.III III-take-PST.WIT.INTERR
'For whom did mother buy a/the gift?'

(54) Nā mi ħalt'izi Ø-oq-xo?
where 2SG.ABS(.I) work I-become-PRS
'Where do you work?'

(55) Nā-r (Ø-ik'i-x)?
where-LAT I-go-PRS
'Where are you going?' (addressing a man)

(56) Neti b-ik'-ān idu-ɣor?
when IPL-go-FUT.DEF home-VERS
'When are we going home?'

(57) Didur ža r-oy-x?
how DEM.ABS(.IV) IV-do-PRS
'How is this done?'

(58) Šida nedur r-od-ä?
why so IV-do-PST.WIT.INTERR
'Why did you do such a thing?'

The compound wh-expressions *didur-šebi* 'how-what' and *šebi-didur* 'what-how', which seem to be in free variation, are used the same way as the absolutive *šebi*, but with the additional connotation of surprise:

(59) Didur=šebi r-oq-no?
what IV-become-PST.nWIT
'What on earth happened?'

Tsez puts its rich case system to work by utilizing different forms of the word *šebi* to express distinct interrogative meanings. In particular, various forms of *šebi* can be used to express questions about reason and manner; such questions occur in addition to questions formed with the dedicated adverbial wh-words *šida* 'why' and *didur* 'how' (shown above).

(60) Łina-q mi nece q'^{w}arid y-oq-xo?
what-POSS.ESS 2SG.ABS(.II) so sad II-become-PRS
'Why are you so sad?' (lit.: on what…)

(61) Łina-r ža šebin r-ow-ä mi?
what-LAT DEM thing.ABS.IV IV-bring-PST.WIT.INTERR 2SG.ERG
'What did you bring this for?'

(62) Łina-x r-iy-ä?
what-AD.ESS IV-know-PST.WIT.INTERR
'How do you know?'

(63) Babiy-ä mi łina-ł xizay Ø-egir-ä?
father-ERG 2SG.ABS(.I) what-CONT.ESS behind I-send-PST.WIT.INTERR
'What did Father send you for?'

(64) T'ok'ow elu-r łina-s q'$^{w\varsigma}$ariłi yoł?[8]
more 1PL-LAT what-GEN1 woe.ABS.IV be.PRS
'What else should we worry about?' (lit.: more to us what's woe is?)

The predicative component of a copular clause can also be questioned; in such cases, the copula itself may be omitted (as is often the case in regular copular clauses, see CH. YY [Basic clause types]). Most commonly, the interrogatives *šebi* 'what; who' and *didiw* 'what; which' are found in that predicative position. For example:

(65) Mi šebi (yoł)?
2SG.ABS who/what be.PRS
'What are you?' (usually asked about profession, occupation)

(66) Ža debi ƛe didiw zow-n?
DEM 2SG.GEN1 bridge.ABS.III what.ATTR be.PST-PST.nWIT
'That bridge of yours was of what kind?' (Goqin zirun:20)

(67) Yizi didiw xalq'i (yoł)?
DEM.IPL.ABS what.ATTR people.ABS.IPL be.PRS
'What kind of people are they?'

The wh-expression can be separated from the copula, as in the following example:

(68) Šebi ža nediw baħarči Ø-oƛix-ä?
what/who DEM such hero.ABS.I I-appear-PRS-INTERR
'Who is that brave man?' (ʕAliqilič:98)

[8] In traditional texts, we also find the following version of this question, which is considered stylistically charged. The sentence in (64) was offered instead of (i):

(i) T'ok'ow elu-r q'$^{w\varsigma}$ariłi łina-s?
more 1PL-LAT woe.ABS.IV what-GEN1 (Hibos hunar:27)
'What else is there for us to worry about?'

Attributive and genitive modifiers of nouns can be questioned only in situ, in contrast to constituent wh-phrases, which can be displaced. In the next example, *didiw* 'what; which' can appear inside the noun phrase *didiw gedobi* but cannot be dislocated to the clausal periphery (69b). Note that non-interrogative attributive modifiers can be discontinuous, as shown by (70b) (see also CH. YY [Noun phrase]).

(69)	a.	Debe-r	didiw	gedo-bi	r-eti-x?
		2SG-LAT	what.ATTR	shoe-PL.ABS.n1PL	n1PL-want-PRS
		'What shoes do you like?'			
	b.	*Didiw	debe-r	gedo-bi	r-eti-x?
		what.ATTR	2SG-LAT	shoe-PL.ABS.n1PL	n1PL-want-PRS
(70)	a.	Debe-r	cuda	gedo-bi	r-eti-x-ä?
		2SG-LAT	red	shoe-PL.ABS.n1PL	n1PL-want-PRS-INTERR
	b.	Cuda	debe-r	gedo-bi	r-eti-x-ä?
		red	2SG-LAT	shoe-PL.ABS.n1PL	n1PL-want-PRS-INTERR
		'Do you like red shoes?'			

In the following examples, the genitive of possessor appears in the interrogative; it cannot be discontinuous either. Non-interrogative adnominal genitives, on the other hand, can be displaced (CH.YY [Noun phrase]).

(71)	a.	Debe-r	łu-s	kid	y-ukay-ä?
		2SG-LAT	who-GEN1	girl.ABS.II	II-see-PST.WIT.INTERR
		'Whose daughter did you see?'			
	b.	*Łu-s	debe-r	kid	y-ukay-ä?
		who-GEN1	2SG-LAT	girl.ABS.II	II-see-PST.WIT.INTERR
(72)	a.	Eƛ'i	łu-s	kid	y-ik'-ä?
		last.year	who-GEN1	girl.ABS.II	II-go-PST.WIT.INTERR
		'Whose daughter left last year?'			
	b.	*Łu-s	eƛ'i	kid	y-ik'-ä?
		who-GEN1	last.year	girl.ABS.II	II-go-PST.WIT.INTERR
(73)	a.	Łu-z	esi-y-ä	baru	y-ow-ä?
		who-GEN2	sibling-OS-ERG	wife.ABS.II	II-bring-PST.WIT.INTERR
		'Whose brother got married?' (lit.: brought wife)			
	b.	*Łu-z	baru	esi-y-ä	y-ow-ä?
		who-GEN2	wife.ABS.II	sibling-OS-ERG	II-bring-PST.WIT.INTERR

Inanimate adnominal genitives are grammatically possible but rare. They are mainly observed in some set expressions such as the ones below:

(74)	Łina-s	ħal	yisi-ƛ'	yoł?
	what-GEN1	state.ABS.III	DEM.I-SUPER.ESS	be.PRS
	'What is weighing on him?' (lit.: state of what is on him?) (based on Eniws esiw:35)			
(75)	Mi	łina-s	pikru	b-oy-x?
	2SG.ERG	what-GEN1	thought.ABS.III	III-do-PRS
	'What are you thinking about?' (lit.: thought of what…)			

Complements of postpositions can be questioned only in situ. Compare the grammatical question in (76a) and the ungrammatical (76b), where the wh-word has been dislocated:

(76) a. Nes-ä yiλa sual-yo-r łä-λ'-āy xizaz
DEM.I-ERG DEM.nI question-OS-LAT what-SUPER-ABL behind
žawab neλ-ä?
answer.ABS.III give-PST.WIT.INTERR
'Who did he answer after?'

b. *Łä-λ'-āy nes-ä yiλa sual-yo-r xizaz
what-SUPER-ABL DEM.I-ERG DEM.nI question-OS-LAT behind
žawab neλ-ä?
answer.ABS.III give-PST.WIT.INTERR

Regular interrogative phrases in Tsez appear with prominence on the question word, followed by a falling contour, as shown in the charts below. Pitch prominence is observed in all three positions associated with wh-words (clause-initial, immediately preverbal, and in situ), but it seems stronger when a wh-word is in situ.

This pattern is different from the pattern in English, where pitch prominence is associated with echo-questions, but it is similar to the pattern found in Japanese (Ishihara 2002, 2007), where regular interrogative phrases are also prominently accented.

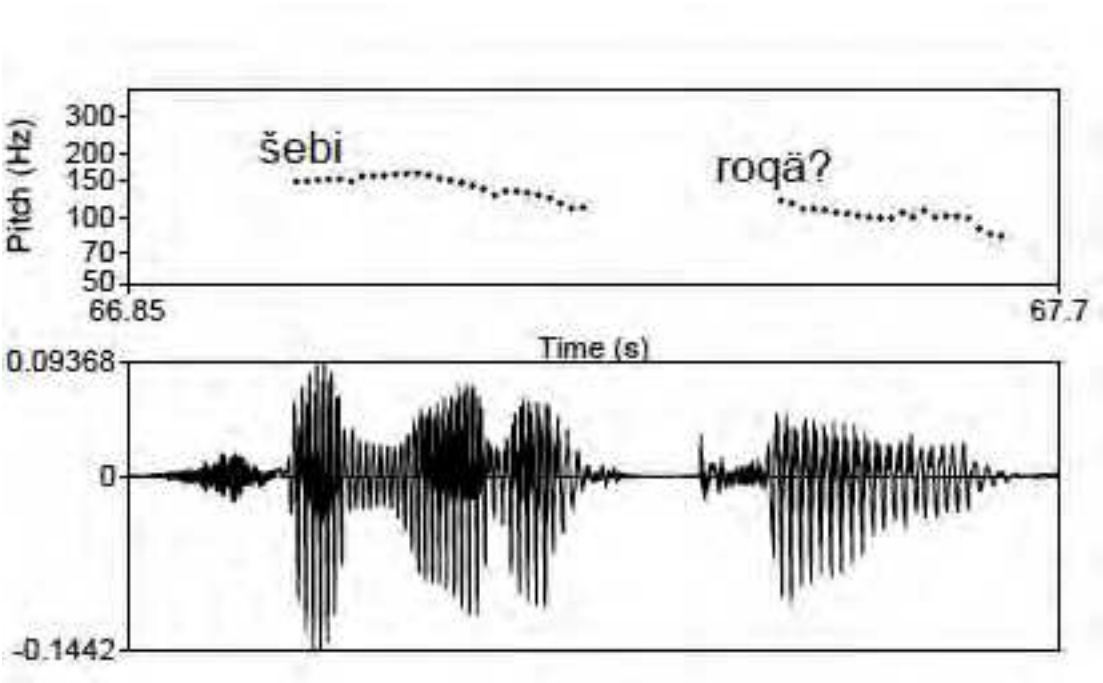

Figure 1. Pitch contour for the question *šebi roqä?* 'What happened?'

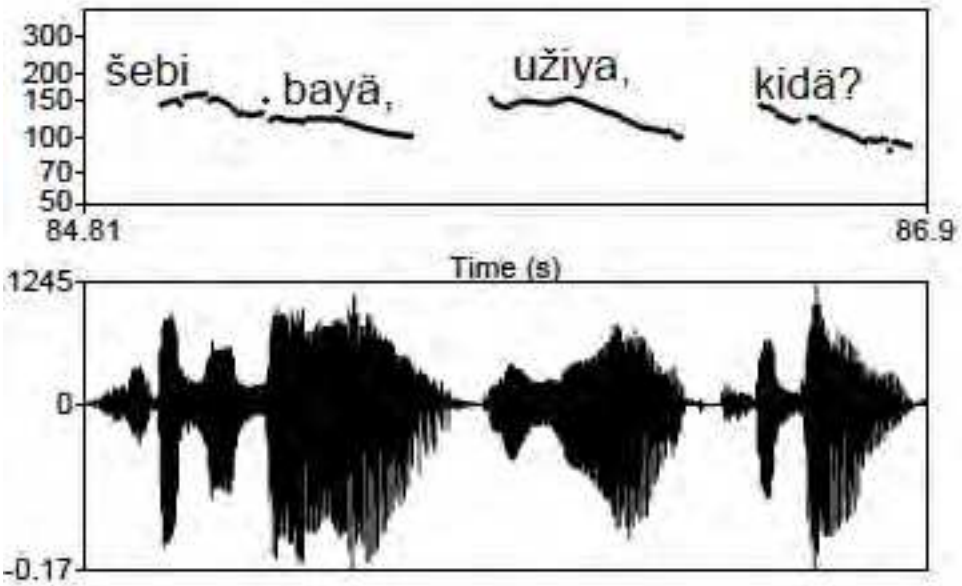

Figure 2. Pitch contour for the question *šebi bayä, užiyä, kidä?* 'Who came, boy or girl?'

3.1.2 Impossible interrogative structures

The use of wh-phrases is extensive; however, it's not unconstrained. The following expressions cannot be questioned:

(77) Expressions that cannot be questioned in wh-interrogatives:
- a. subconstituents of coordinate structures
- b. the absolutive patient in the biabsolutive construction with the resultative participle AGR-*ičäsi*
- c. constituents of participial relative clauses
- d. constituents of complements to nouns
- e. constituents of adverbial clauses

We illustrate these constraints in turn. Wh-questions formed from a subconstituent of a coordinate structure are impossible, which indicates that Tsez wh-questions are sensitive to the coordinate structure constraint (Ross 1967). The constraint applies equally to coordination with 'and' and 'or':

(78) *Nes-ä šebi-n Sult'an-no goλ'-ä?
DEM.I-ERG who.ABS.I/II-and Sultan.ABS.I-and call-PST.WIT.INTERR
("Did he call who and Sultan?")

(79) *Yagi eλ'i yagi neti elu-s žek'u-bi b-ex-ä?
or last.year or when 1PL-GEN1 person-PL.ABS.IPL IPL-die-PST.WIT.INTERR
("Did your people die last year or when?")

Forker (2013:750) indicates that in Hinuq, one of the subconstituents in a coordinate structure can be questioned. We have not been able to obtain the same result for regular wh-questions in Tsez; however, such forms are possible as echo questions, which we will discuss in section 3.4.

In the biabsolutive construction with the resultative participle AGR-*ičäsi*, it is impossible to form a wh-question from the patient (object). Compare the examples in (43) above and their counterparts with AGR-*ičäsi*:

(80) a. *Eniw šebi r-oy-x y-ič-äsi
mother.ABS.II what.ABS.IV IV-do-IPFV.CVB II-stay-RES
zow-ä?
AUX.PST-PST.WIT.INTERR
('What was mother making?')

b. Šebi čorpa r-oy-x y-ič-äsi
who.ABS.I/II soup.ABS.IV IV-do-IPFV.CVB II-stay-RES
zow-ä?
AUX.PST-PST.WIT.INTERR
'Who was making soup?'

It is impossible to question constituents of participial relative clauses. Thus:

(81) *[Na-z-āy y-äy-ru] kid y-ukay-x debe-r?
where-OS-ABL II-come-PST.PTCP girl.ABS.II II-see-PRS 2SG-LAT
("You see a girl who is coming from where?")

(82) *[Ła-r täƛ-ru] micxir b-ok'ek'-ä žed-ä?
who-LAT give.PST.PTCP money.ABS.III III-steal-PST.WIT.INTERR DEM.IPL-ERG
("They stole the money that had been given to whom?")

Nominalized participial clauses can also appear in the adnominal genitive, as complements of nouns such as 'fact', 'rumor', 'news' (see CH. YY [Noun phrase]). Wh-questions of such complement clauses are equally impossible, reflecting adherence to the complex noun phrase constraint on wh-questions (Ross 1967).

(83) *[Xalq'i-mo-r šebi r-äs-ru]-s xabar
people-OS-LAT what.ABS.IV IV-find-PST.PTCP-GEN1 news. ABS.III
teq-ä?
hear-PST.WIT.INTERR
("What did you hear the news that people found?")

Wh-questions formed from constituents of adverbial clauses are ungrammatical. In a number of instances, adverbial clauses are based on nominalized participial clauses, so one could imagine that the same constraint examined above for relative clauses proper continues to apply. For example, the adverbial clause of simultaneity is produced from the ablative form of a nominalized participial clause:

(84) *[Beɬi-ƛ' šebi b-äk'-äsi yäɬ-zay] ƛirba-bi
chase-SUPER.ESS who.ABS.IPL IPL-go-RES be.PRS-while guest-PL.ABS.IPL
b-ay-ä?
IPL-come-PST.WIT.INTERR
("The guests arrived when who were away hunting?")

However, it is equally impossible to form wh-questions from constituents of adjunct clauses which are not derived from participles. Consider the conditional clause below:

(85) *[Becaw-ni žek'-ä šebi oz-za-q r-iħi-näy]
blind-DEF person-ERG what.ABS.IV eye-PL.OS-POSS.ESS IV-put-COND
neɬ-ä kanɬi b-ay-r-xo?
DEM.nI-IN.ESS light.ABS.III III-come-CAUS-PRS
("What is it that if the blind man puts on his eyes, they will see again (lit.: he will bring light into it)?")

3.1.3 Answers to wh-questions

The reply to a wh-question must match the case form of the wh-word. For example, the answer to (86-A) must be in the ergative, and the answer to (87-A), in the lative.

(86) A: Łu ža r-oy-ä?
who.ERG DEM.ABS(IV) IV-do-PST.WIT.INTERR
'Who did that?'
B: ʕAl-ä/*ʕAli.
Ali-ERG/Ali-ABS
'Ali.'

(87) A: Eni-y-ä łu-r sayɣat b-is-ä?
mother-OS-ERG who-LAT gift.ABS.III III-take-PST.WIT.INTERR
'For whom did mother buy a/the gift?'
B: Mariyat-e-r/*Mariyat/*Mariyat-qo-r.
Mariyat-OS-LAT/Mariyat-ABS/Mariyat-POSS-ESS
'For Mariyat.'

If the interrogative expression refers to an attributive constituent of a noun phrase or to the adnominal genitive, the head noun can be omitted from the answer. For example:

(88) A: Didiw gedo-bi r-eti-x?
what.ATTR shoe-PL.ABS.n1PL n1PL-want-PRS
'What shoes would you like?'
B: R-ätiru italiya-s (gedo-bi).
n1PL-any Italy-GEN1 shoe-PL.ABS.n1PL
'Any Italian ones.'

(89) A: Łu-z esi-y-ä baru y-ow-ä?
who-GEN2 sibling-OS-ERG wife.ABS.II II-bring-PST.WIT.INTERR
'Whose brother got married?' (lit.: brought wife)

B: (Dä-z) iškola-zo halmaɣ-e-z (esi-y-ä).
1SG-GEN2 school-ATTR.OS friend-OS-GEN2 sibling-OS-ERG
'(My) school friend's (brother).'

If an interrogative phrase is expressed by an adverbial, the answer appears in the form appropriate to the verb or postposition associated with it. For example, the expression of time in the reply below requires the use of the super-essive form, while the expression of reason can appear in the distal super-essive or in the sub-ablative:

(90) A: (Mi) neti Ø-ik'i-x?
2SG.ABS(I) when I-go-PRS
'When are you going?'
B: Oc'ira-ƛ'.
nine.OS-SUPER.ESS
'At nine o'clock.'

(91) A: (Mi) šida nedur r-od-ä?
2SG.ERG why so IV-do-PST.WIT.INTERR
'Why did you do such a thing?'
B: ʕAbdalɬi-ƛ'-āz/micxir-ƛ-āy.
foolishness-SUPER.ESS-DIST/money-SUB-ABL
'Out of stupidity/for the money.'

If a question is in the affirmative but the answer to it is negative, that answer must include both a negative verb and the negative polarity item triggered by it. Negative polarity items are derived either from interrogative expressions or from universally quantified expressions with the addition of the scalar focus particle *–kin* (see CH. YY [Particles]). The particle itself does not impart the negative reading, and this reading is only assumed under negation. However, in negative answers to wh-questions, the negative verb can actually be omitted, leaving only the polarity item, which continues to carry the negative interpretation. Consider the following examples:

(92) A: łā-r yedu t'ek teƛ-ä mi?
who-LAT DEM book.ABS.II give-PST.WIT.INTERR 2SG.ERG
'Whom did you give this book?'
B: i. łā-r-kin (teƛ-inč'u).
who-LAT-FOC give-PST.WIT.NEG
ii. łā-r-no-kin (teƛ-inč'u).
who-LAT-UNIV-FOC give-PST.WIT.NEG
'Nobody.'

3.2 Embedded wh-questions

The most common way of expressing what may count as an embedded wh-question is by introducing it with the quotative *–ƛin* (see CH. YY [Complement clauses]). Some wh-questions are clearly reported speech, as in the following example, where there is a pause between the reported constituent and *esirno:*

(93) “Łu mi nediw b-od-ä-ƛin?” esir-no
who.ERG 2SG.ABS(.III) such III-do-PST.WIT.INTERR-QUOT ask-PST.nWIT
mamalay-ä.
rooster-ERG
‘The rooster asked, “Who did that to you?”’ (Onočun, mamalayn:19)

The next example includes a vocative, which indicates reported speech as well:

(94) “Hoboy-gon šebi r-oq-no, ziru-ƛin?” esir-no
now-CONTR what.ABS.IV IV-become-PST.nWIT fox-QUOTE ask-PST.nWIT
zey-ä.
bear-ERG
‘ “And now what happened, Fox?” asked the bear.’ (Zirun zeyn:21)

In CH. YY [Complement clauses] we show that *–ƛin* can also introduce genuine embedded complements. The following example is less clear; in isolation it could be either reported speech or a finite complement clause:

(95) Už-ä gulu-q esir-no [yedu šebi
boy-ERG horse-POSS.ESS ask-PST.nWIT DEM what.ABS
šebin]-ƛin.
thing.ABS.IV-QUOT
‘The boy asked the horse what that thing was.’ (Beqes ʕUneyzat:200)
‘The boy asked the horse, “What is that thing?”’

Finite clausal complements with interrogatives manifest indexical shift in the same way declarative complement clauses do; when indexical shift is possible embedded questions are not definitely distinct fro, reported speech. For instance, the following example, which includes an embedded question, is ambiguous out of context. It could either have the regular indexical interpretation (IR) or the shifted interpretation (SR) where the second person pronoun is interpreted as referring to ‘Mother’:

(96) Babi-y-ä eniw-q [nā-r mi
father-OS-ERG mother-POSS.ESS where-LAT 2SG.ABS(.II)
y-ik’-ä]-ƛin esir-xo.
II-go-PST.WIT.INTERR-QUOT ask-PRS
‘Father is asking Mother where you (=female addressee) went.’ (IR)
‘Father is asking Mother where she (=mother) went.’ (SR)

Wh-questions can also be embedded in nominalized clauses in *–łi* (see CH.YY [Complement clauses]). For example:

(97) Babiw-r [nā-r eniw y-äk’i-ru-łi] r-iy-x-ānu.
father-LAT where-LAT mother-ABS.II I-go-PST.PTCP-NMLZ IV-know-PRS-NEG
‘Father does not know where Mother went.’

In these clauses, the embedded wh-word has to remain in situ; crucially, it cannot take scope over the material in the matrix clause (Polinsky and Potsdam 2001: 603-604). In other words, there is no Tsez equivalent of sentences such as the English (98):

(98) What did Mother say [(that) the children saw _]?

The corresponding Tsez sentence only has the meaning of a yes-no question; the speaker is inquiring whether or not Mother expressed, stated or asked about what the children saw.

(99) Eni-y-ä [xex-za-r šebi r-ukäy-ru-łi]
mother-OS-ERG child-PL.OS-LAT what.ABS.IV IV-see-PST.PTCP-NMLZ
eƛ-ä/esir-ä?
say-PST.WIT.INTERR/ask-PST.WIT.INTERR
'Did Mother say/ask what the children saw?'
NOT: 'What did Mother say/ask that the children saw?'

This construction is therefore minimally different from an affirmative sentence with an embedded wh-question:

(100) Eni-y-ä [xex-za-r šebi r-ukäy-ru-łi]
mother-OS-ERG child-PL.OS-LAT what.ABS.IV IV-see-PST.PTCP-NMLZ
eƛi-s/esir-si.
say-PST.WIT/ask-PST.WIT
'Mother said/asked what the children saw.'

The closely related Hinuq also disallows wide scope interpretation of wh-expressions in embedded interrogatives with a nominalized verb (Forker 2013: 753, examples (1408a,b)).

Tsez does not show evidence of sluicing. In contexts where sluicing is observed, we find nominalized clauses containing interrogative phrases. The wh-word and the nominalized predicate cannot be deleted, but the rest of the material can be left out. All told, it seems that Tsez only allows pseudo-sluicing. For example (the pseudo-sluice is shown in brackets):

(101) Ža kʷaxat'o Ø-āy amma
DEM.ABS(.I) soon I-come.FUT but
[neti *(Ø-ay-xosi(-łi))] r-iy-x-ānu.
when I-come-PRS.PRTCP-NMLZ IV-know-PRS-NEG
'He will arrive soon but I don't know when.'

(102) Łu-ƛa dow-ƛ'-or qaƛi-s amma
someone.ERG-INDEF 2SG-SUPER-LAT call-PST.WIT but
[łu yāł-ru(łi)] r-iy-x-ānu.
who.ERG be-PST.PRTCP-NMLZ IV-know-PRS-NEG
'Someone called you but I don't know who.'

While the predicate cannot be omitted from indirect fragment questions, fragments in direct questions can be reduced to just the interrogative expression. For example:

(103) A: Łu-ƛa dow-ƛ'-or qaƛi-s.
someone.ERG-INDEF 2SG-SUPER-LAT call-PST.WIT
'Someone called you.'
B: Łu?
who.ERG
'Who?'

(104) A: Načalnik-ä ła-r-ƛa premiya teƛ-no.
boss-ERG someone-LAT-INDEF bonus.ABS.III give-PST.nWIT
'The boss paid someone a bonus.'
B: a. Łā-r-no dice-n?
who-LAT-and how.much-and
b. Dice-n łā-r-no?
how.much-and who-LAT-and
'How much and to whom?'

Note that wh-words can be coordinated in the fragment questions, but they never get coordinated with *–n(o)* 'and' outside such fragments (see section 3.1.1).

3.3 Discourse-linking

Discourse-linked interrogative phrases imply the existence of a context set of familiar entities. For example, in the question *Which dish did you eat?*, there must exist a set of dishes from which the choice is to be made (Pesetsky 1987, Enç 1991). Discourse-linked interrogatives contrast with non-discourse-linked interrogative pronouns such as *who*, which carry no necessary implication about familiar discourse entities. In Tsez, the discourse-linked phrase 'which X' is formed with the dedicated modifier *nāsi*(*ni*). This is an attributive form of the adverb *nā* 'where'; *nāsini* also includes the definite suffix *–ni*. Both *nāsi* and *nāsini* occur in texts, but *nāsini* seems preferred in spoken language. This adjective distinguishes between the direct and oblique form.

Nāsi(ni) is incompatible with questions about properties or kinds. Compare the dialogue below, using *didiw* 'what, which', where the answer 'any Italian shoes' is acceptable, and the infelicity of that answer in the following dialogue. A felicitous answer is shown in B':

(105) A: Nāsi-ni gedo-bi r-eti-x?
which-DEF shoe-PL.ABS.n1PL n1PL-want-PRS
'Which shoes would you like?'
B: #R-ätiru italiya-s.
n1PL-any Italy-GEN1
'Any Italian ones.'
B': Inziri.
DEM.PL
'These ones.'

Some other examples:

(106) Nāsi(-ni) ged debe-r y-eti-x?
which-DEF dress.ABS.II 2SG-LAT II-like-PRS
'Which dress do you like?'

(107) Nāzo-ni kid-b-ā nāsi-ni ziya t'et'-ā?
which.OS-DEF girl-OS-ERG which-DEF cow.ABS.III milk-PST.WIT.INTERR
'Which girl milked which cow?'

(108) Nāzo-ni otax-ā doxtur-ā xal b-oy-x?
which.OS-DEF room-IN.ESS doctor-ERG looking.ABS.III III-make-PRS
'In which room does the doctor see patients?' (lit.: does the looking)

Didiw 'what; which' can combine with nouns in non-discourse linked interrogatives, as in the question about kinds displayed in (88) above, or in the next example.

(109) Nes-ä didiw šebin k'ed-ä?
DEM.I-ERG what.ATTR thing.ABS.IV look.for-PST.WIT.INTERR
'What (what thing) did he look for?'

In a proper context, however, *didiw* NP can also receive a discourse-linked interpretation. For instance, in (110), a familiar set is established overtly by the postpositional phrase *mežuł teł* 'among you', and the phrase *didiw žek'ä* is interpreted as discourse-linked:

(110) Mežu-ł teł didiw žek'-ä dey gulu
2PL-CONT.ESS inside what.ATTR person-ERG 1SG.GEN1 horse.ABS.III
zow-ä?
climb-PST.WIT.INTERR
'Which of you rode (lit.: climbed) my horse?'

The same holds for the wh-word *šebi* used attributively; in a rich context, it can also receive a discourse-linked interpretation. For example, in the following question, the speaker has in mind a familiar set of the dragon's female victims:

(111) Šebi kid [aždaħ-e-r teƛ-ani-x]
what girl.ABS.II dragon-OS-LAT give-MASD-AD.ESS
y-ow-ä?
II-take-PST.WIT.INTERR
'Which girl did you bring (take) to give to the dragon?' (based on ʕAliqilič:96)

See also CH. YY [Agreement] for a discussion of discourse-linked interrogative phrases and their interaction with long-distance agreement.

Wh-interrogatives that are not discourse-linked show superiority effects, as in English. Questions such as *Who saw what?* are possible, but questions like **What who saw?* are not (see examples (41) and (42) above). When an interrogative expression is discourse-linked, it can appear at the

left periphery of a clause and/or can precede another interrogative. The superiority effects disappear. For example:[9]

(112) Nāsi gulu łu b-is-ä?
which horse.ABS.III who.ERG III-take-PST.WIT.INTERR
'Which horse did who buy?'

3.4 Wh-echo questions

In general, an echo-focused phrase can be a normal phrase (a polar or yes-no echo question) or a wh-word (a constituent or wh-echo questions). Here we will concentrate only on wh-echo questions. In such echo questions, the interrogative phrase is not associated with new information; its main function is to request a clarification or re-iteration of what has already been said. Although wh-questions proper and echo questions often overlap, languages have subtle ways of distinguishing them. For example, in the German example below, the stress pattern distinguishes the echo question from a regular one, if only for a subset of wh-words (Reis 1991; Truckenbrodt 2013):

(113) Hans hat es WOfür/*woFÜR gekauft.
Hans has it what-for bought
'Hans has bought this for WHAT?'

One of the clues identifying echo-questions is prosody. For example, in English, an echo-question involves an echo-focused phrase that bears L+H* intonation with a HH% boundary tone (Bolinger 1987; Artstein 2002).

In Tsez, echo questions and regular wh-questions differ, although subtly. The first difference has to do with word order. Echo questions in Tsez can have an interrogative in the postverbal position, which is off limits to regular wh-questions. Recall the ungrammatical examples in (40a-c) and compare the acceptable questions below.[10] These questions MUST have an echo interpretation; the speaker can utter them only if s/he did not hear or understand what the boy gave to the girl. Such questions end with a slight rising contour.

(114) a. Už-ä teƛ-ä kid-be-r šebi?
boy-ERG give-PST.WIT girl-OS-LAT what.ABS.IV
b. Už-ä kid-be-r teƛ-ä šebi?
boy-ERG girl-OS-LAT give-PST.WIT what.ABS.IV
'The boy gave the girl WHAT?'

We also noted, in section 3.2, that regular interrogatives in embedded nominalized questions do not take scope outside of their clause. When a wh-word can be interpreted clearly as an echo

[9] Multiple wh-questions are still dispreferred even if they include discourse-linked interrogatives, so examples like this one are only available in elicitations.

[10] In such echo questions, the preference is for the wh-word to appear in the final position, which is why only two options are shown.

interrogative, it can take scope over the matrix clause. For example, consider the following context. If B did not catch what A was saying, the echo question below is acceptable, and in that case, *šebi* 'who' takes wide scope. The question means 'Who did he say was wrong?', not 'Did he say "Who is wrong"?', as noted for (99) above.

(115) A: Nes-ä eƛi-s # ʕAli ʕayibiyaw yoł-ƛin.
DEM.I-ERG say-PST.WIT Ali wrong be.PRS-QUOT
'He said, "Ali is wrong."'
B. Nes-ä šebi ʕayibiyaw yäł-ru-łi
DEM.I-ERG who.ABS wrong be.PRS-PST.PTCP-NMLZ
eƛ-ä?
say-PST.WIT.INTERR
'He said that WHO is wrong?'

Echo phrases in constituent questions are known to take the widest scope possible (Bolinger 1987; Noh 1995), so this result is in keeping with the general observations on the difference between regular wh-questions and echo questions.

If a wh-word appears preverbally, the differences between regular and echo questions become more subtle. Recall that regular wh-phrases bear pitch prominence followed by a falling contour. Preverbal interrogative phrases in Tsez echo questions also bear prominence, but this prominence is followed by a rise, not a fall. Although we have not had a chance to investigate this contrast instrumentally, it seems less pronounced than the difference in pitch found in English. This in turn raises questions about the prosodic signatures of echo questions in languages such as Tsez or Japanese, where the interrogative phrase can remain in situ.

If we assume both the difference in placement and the tentative prosodic difference just discussed, we can test the appearance of echo questions in contexts where regular wh-questions are impossible (see section 3.1.2 above). Cross-linguistically, echo questions are known to be insensitive to island constraints, so one would expect Tsez echo questions to follow that pattern. This expectation is confirmed. The first example is straightforward: since the coordinate structure can follow or precede the interrogative verb, the postverbal position is in and of itself a sign of an echo question. In both positions, the question is interpreted as a request for a reprise or clarification:

(116) Nes-ä goƛ'-ä šebi-n Sult'an-no?
DEM.I-ERG call-PST.WIT.INTERR who.ABS.I/II-and Sultan.ABS.I-and
'He called WHOM and Sultan?" (cf. the ungrammatical (78))
(117) Nes-ä šebi-n Sult'an-no goƛ'-ä?
DEM.I-ERG who.ABS.I/II-and Sultan.ABS.I-and call-PST.WIT.INTERR
'He called WHOM and Sultan?" (cf. the ungrammatical (78))

Recall that discontinuous wh-words are impossible, as illustrated in (71) above. However, discontinuity is possible with echo questions. Thus, in reply to (118-A), one could use the echo question in (118-B):[11]

(118) A: Pat'i-s kid y-ukay-s.
Fatima-GEN girl.ABS.II II-see-PST.WIT
'I saw Fatima's daughter.'
B: Łu-s debe-r kid y-ukay-ä?
who-GEN1 2SG-LAT girl.ABS.II II-see-PST.WIT.INTERR
'You saw WHOSE daughter?'

Questions in which the interrogative phrase appears in a relative or adjunct clause do not offer the variation in word order needed to separate the readings; the interrogative is always preverbal. However, the instances where such interrogative phrases are allowed are invariably interpreted as requests for clarification and reprisal. Some examples:

(119) A: [Nesi-z-tow ħakim-qo täƛ-ru] micxir
DEM.I-GEN2-FOC boss-POSS give.PST.PTCP money.ABS.III
b-ok'ek'-si rasul-ä.
III-steal-PST.WIT Rasul-ERG
'Rasul stole the money that they gave to his boss.'
B: Nes-ä [łu-q täƛ-ru] micxir
DEM.I-ERG who-POSS give.PST.PTCP money.ABS.III
b-ok'ek'-ä?
III-steal-PST.WIT.INTERR
'He stole the money that had been given to WHOM?'
(120) [Łina-q-āy ʕiyay-xosi] kid y-ay-ä?
what-POSS-ABL cry-PRS.PTCP girl.ABS.II II-come-PST.WIT.INTERR
'The girl who was crying WHY came here?'

---

[11] The echo interrogative can also occur post-verbally:

(i) Debe-r y-ukay-ä łu-s kid?
2SG-LAT II-see-PST.WIT.INTERR who-GEN1 girl.ABS.II
'You saw WHOSE daughter?'

The separation of the genitive and the noun, so that one would appear pre-verbally and the other post-verbally, is not allowed under any interpretation:

(ii) *Debe-r łu-s y-ukay-ä kid?
2SG-LAT who-GEN1 II-see-PST.WIT.INTERR girl.ABS.II
(iii) *Debe-r kid y-ukay-ä łu-s?
2SG-LAT girl.ABS.II II-see-PST.WIT.INTERR who-GEN1

We can summarize these preliminary observations on the differences between regular wh-words and echo wh-words as follows:

	Regular Wh-words	**Echo Wh-words**
Post-verbal placement	Impossible	Possible
Possible in islands	No	Yes
Takes scope over the entire utterance	No	Yes
Prosodic signature	Prominence with declining contour	Prominence without declining contour

Exclamatives

Exclamative utterances are used to express surprise at the presence or intensity of a certain property, which has exceeded the speaker's expectations (cf. Grimshaw 1979; Michaelis 2001). As Michaelis puts it, exclamatives imply "a non-canonical situation … whose absence a speaker would have predicted, based on a *a priori* assumption or set of assumptions, e.g. a stereotype, a set of behavioural norms, or a model of the physical world" (Michaelis 2001: 1039).

Cross-linguistically, exclamatives have a number of recurrent properties. In particular:

(1) Properties of exclamatives
a. Co-occurrence with interjections that emphasize the speaker's affective stance
b. Use of free-standing noun phrases
c. Presence of degree adverbs, indicating reference to a particular scale
d. Use of question words, which also reflects the scalar character of exclamatives
e. Similarity to the complements of factive verbs, which can be explained by the fact that exclamatives contain a presupposed proposition (Grimshaw 1979)

Tsez uses several patterns to express exclamatives: noun phrases without a verb, wh-questions, and non-witnessed past-tense verb forms. All these patterns can be accompanied by exclamative interjections and often co-occur with a wh-word. All types of exclamative sentences can be embedded, but only under the quotative *–ƛin.* The main interjections found in exclamatives are as follows:

(2)	a.	aʕa, ƛ'eʕ	'no, no way'
	b.	ay, ah, alā	'ouch'
	c.	aha(h)	'yes, oh yes, so, aha'
	d.	Ø-ey/y-ey	'hey' (addressing a man/a woman)[1]
	e.	ha, hay	expressions of general surprise
	f.	hale, wele, were	'whoa'
	g.	he	'hey, here'
	h.	hē, hēhe, hehe	'gee'
	i.	ho	'here'
	j.	oh	'oh; alas'
	k.	puh, puy, puy-pay	expressions of disgust
	l.	waħ, wah	'wow'
	m.	walla(h), aman-allah,	'Oh my God; gosh'
	n.	way	'oh no; woe'

Noun phrases in the exclamative function (1b) are not very common. These noun phrase exclamatives are often set expressions, such as the ones shown in (5), (6) and (7):

[1] *Ey* can be used for both males and females, by *yey* is only female-oriented.

(3) Puy-pay aq'iw žek'u-s gut'-muši.
ew-blech strange person-GEN1 [smoke-air].ABS.IV
'Gross, an unknown person's scent!' (ʕAliqilič:146)

(4) Oh q'urumsaq!
oh rascal
'What a rascal!'

(5) ʕauw dey rok'u!
oh 1SG.GEN1 heart.ABS.IV
'How scary!' (typically used by female speakers)

(6) Oh barkaman!
oh grace
'How wonderful!'

(7) Balah-ɣ^{w}andi!
woe-misfortune
'Woe is me!'

Free-standing infinitival or masdar clauses can be used as exclamatives. For example:

(8) Šahar-y-a-ɣor Ø-ik'-a!
city-OS-IN-VERS I-go-INF
'Oh, to go to the city!'

(9) Xabar es-ānč'ini!
news.ABS.III say-MASD.NEG
'Not to tell the news!'

A number of Nakh-Dagestanian languages use nominalized clauses as exclamatives — cf. Kalinina (2011) on such exclamatives in Archi, Avar, and the closely related Bezhta. Tsez does not seem to follow this strategy; although the nominalizing suffix *-łi* is in wide use in Tsez, nominalized exclamatives with that suffix are rejected. Compare the well-formed verbal exclamative in (10) and its ungrammatical nominalized counterparts in (11a,b):

(10) Dice Ø-ˢeženi babiw ħarƛi-x!
how.much I-old father.ABS.I snore-PRS
'Does grandfather snore!' (lit.: how much grandfather snores!)

(11) a. *Dice Ø-ˢeženi babiw ħarƛi-x-łi!
how.much I-old father.ABS.I snore-PRS-NMLZ
b. *Dice Ø-ˢeženi babiw ħarƛa-łi/ħärƛ-ru-łi!
how.much I-old father.ABS.I snore-NMLZ/snore-PST.PCP-NMLZ
('Does grandfather snore!')

The two most common ways of conveying exclamative content in Tsez are through questions with an interrogative particle (typically on the degree adverb or wh-word), and through verbs in the non-witnessed past tense. We will examine each of these strategies in turn.

Consider the following interrogative clause:

(12) Didur dow-qo ža k'ezi r-oq-x-ä?
how 2SG-POSS.ESS DEM.ABS(.IV) able IV-become-PRS-INTERR
'How do you get to do that?'

This question can be used as a genuine information question, but it can also indicate surprise, in which case its meaning is close to that of an exclamative. If the interrogative enclitic appears on the wh-word, and not on the predicate, the utterance is interpreted as exclamative:

(13) Didur-ä dow-qo ža k'ezi r-oq-xo!
how-INTERR 2SG-POSS.ESS DEM.ABS(.IV) able IV-become-PRS
'The thing you did!'/'Really?' (lit.: how you were able to do that?)

Similarly, (14) is a question (albeit an odd one), while (15) is a clear exclamative:

(14) Ža q'urumsaq (yoł-ä)?
DEM.ABS rascal be.PRS-INTERR
'Is s/he a rascal?'
(15) Oh, mi nedur-ä/didur-ä q'urumsaq!
oh 2SG.ABS so-INTERR/how-INTERR rascal
'Oh what a rascal you are!'

In the next minimal pair, (16) can be a genuine question or, given the proper context, an exclamative. Meanwhile, (17), with the interrogative marker on the postverbal locative expression, is unambiguously exclamative; postverbal expressions are interpreted as given, backgrounded information (see CH.YY [Word order]), and the appearance of an interrogative marker on the non-focused material resolves the ambiguity in favor of the exclamative:

(16) Hoboy dā-de-si-tow žek'u ānu-yā t'oro?/!
now 1SG-APUD.ESS-ATTR-FOC man.ABS.I be.PRS.NEG-INTERR here
'Isn't there anyone close to me in age here?'
'There is nobody close to me in age here!'
(17) Hoboy dā-de-si-tow žek'u ānu t'oro-yā!
now 1SG-APUD.ESS-ATTR-FOC man.ABS.I be.PRS.NEG here-INTERR
'There is nobody close to me in age here!'

When used in a question proper, the interrogative particle can attach to different constituents, as shown in
(18) and discussed in CH.YY [Interrogatives], but crucially it cannot appear on more than one constituent. Meanwhile, exclamatives allow for multiple occurrences of the interrogative particle, as illustrated in (19):

(18) a. Sis-ā q'wariłi b-ay-si neł-ƛ'o?
one-INTERR hardship.ABS.III III-come-PST.WIT DEM.nI-SUPER.ESS
'Was it (only) one hardship that she had?' (lit.: did one hardship come upon her?)
b. Sis q'wariłi b-ay-ā neł-ƛ'o?
one hardship.ABS.III III-come-PST.WIT.INTERR DEM.nI-SUPER.ESS

'Did she experience hardship?'

c. *Sis-ā q'wariłi b-ay-ā neł-ƛ'o?
one-INTERR hardship.ABS.III III-come-PST.WIT.INTERR DEM.nI-SUPER.ESS
('Did she experience hardship?')

(19) Sis-ā q'wariłi b-ay-ā neł-ƛ'o!
one-INTERR hardship.ABS.III III-come-PST.WIT.INTERR DEM.nI-SUPER.ESS
'How she suffered!'

Turning now to the use of wh-words with the interrogative marker, we have already noted that *nedur* 'so, such', and *didur* 'how' often appear interchangeably in exclamatives; cf. (15) and another example below:

(20) Oh nedur-ä/didur-ä łočyaƛ' k'oƛi-x debi esiw!
wow so-INTERR/how-INTERR dancing run-PRS 2SG.GEN1 sibling.ABS.I
'How well your brother dances!'

Other wh-words can also appear with the interrogative marker in exclamatives. Compare the regular question in (21) and the corresponding exclamative in (22):

(21) Howži šebi-tow r-ädi-yä?
now what.ABS.IV-FOC IV-do.FUT-INTERR
'What should I do now?'

(22) Šebi-tow-ä/R-aq'ˤu-tow-ä r-ädi!
what.ABS.IV-FOC-INTERR/IV-many/much-FOC-INTERR IV-do.FUT
'How much to do!'

Dice 'how much/many' is the most common wh-expression used in exclamatives. Unlike degree expressions and other wh-words, *dice* in exclamatives does not take the interrogative marker. In principle, this expression *can* co-occur with an interrogative marker; it is only in exclamatives that such a combination is disallowed. The interrogative marker appears on the predicate instead, as in regular questions:

(23) a. Oh dice di akił-ä!
oh how.much 1SG.ABS get.tired-PST.INTERR
'Oh how tired I am!'

b. *Oh dice-yä di akił-xo/akił-si.
oh how.much-INTERR 1SG.ABS get.tired-PRS/get.tired-PST.WIT

(24) a. Dice ixiw miƛ'i zow-ä ent'o!
how.much big ram.ABS.III be.PST-PST.WIT.INTERR here
'What a big ram was here!' (Babiwn uzin Okun:47)

b. *Dice-yä ixiw miƛ'i zow-s ent'o!
how.much-INTERR big ram.ABS.III be.PST-PST.WIT here

(25) a. Dice zaman b-ik'i-x-ä.
how.much time.ABS.III III-go-PRS-INTERR

'How much time has passed?' (question)/'How much time has passed!' (excl.)

b. B-aq'ˢu-yä zaman b-ik'i-x!
III-many/much-INTERR time.ABS.III III-go-PRS
'How much time goes by!'

We hypothesize that this restriction may follow from the pervasive exclamative use of *dice*, rather than from a structural constraint. Because *dice* is such a common marker of exclamatives, it may be construed synchronically as a particle rather than as a regular interrogative expression, and that may prevent it from co-occurring with the interrogative marker.

A common way of conveying exclamative meaning is through the use of a non-witnessed past tense predicate. Compare example (10) above and its non-witnessed past tense counterpart below, which can be used to comment on the snoring that is going on at the moment of the utterance:

(26) Dice Ø-ˢeženi babiw ħarƛi-n!
how.much I-old father.ABS.I snore-PST.nWIT
'Does grandfather snore!'

The next example illustrates the use of the unwitnessed past in addressing a villain:

(27) Oh mi q'urumsaq zow-n!
oh 2SG.ABS rascal be.pst-PST.nWIT
'Oh what a rascal you are!'

Unwitnessed past is not typically used in statements about the speaker's own experiences or cognitive states, since the speaker is assumed to have direct evidence of those. Consequently, the use of this predicate form with the first person is one of the clearest indications that the tense has been chosen to mark an exclamative. Consider the following example, which has a clear exclamative interpretation:

(28) Waħ… moƛ'oqˢoy sadaq ānu-si gulu
whoa bridle.ABS.IV together be.PRS.NEG-ATTR horse.ABS.III
teƛ-xosi moči žäd dä-r b-ukad-äsi zow-nč'u!
give-PRS.PTCP place.ABS.III yet 1SG-LAT III-see-RES be-PST.nWIT
'Whoa, I have NEVER seen a place where they sell a horse separate from a bridle!'
(Babiwn, užin, Okun:51)

The interrogative and unwitnessed-past methods of expressing an exclamative are not mutually exclusive; for instance, in (29), both strategies co-occur and are reinforced by the use of the degree expression *nedur:*

(29) Oh mi nedur-ä q'urumsaq zow-n!
oh 2SG.ABS such-INTERR rascal be.PST-PST.nWIT
'Oh what a rascal you are!' ((ʕAliqilič:71)

Like some other Daghestanian languages, Tsez can make use of a specialized variant of the verb *ez*^{w}- 'look' to signal the exclamative reading.[2] This verb, used either in the perfective converbal form or in the imperative form, expresses an exclamative utterance with the quotative enclitic –*ƛin*. Normally *ez*^{w}- 'look' does not combine with quotative complement clauses, so this specialized use is unambiguously associated with the exclamative interpretation.

(30) Dice bercinaw r-igu šeƛ'u r-iži-x-ƛin
how.much beautiful IV-good clothes.ABS.IV IV-rise-PRS-QUOT
b-ezu-n nāsin xalq'i-n ƛexu-n!
IPL-look-PFV.CVB all people.ABS.IPL-TOP remain-PST.nWIT
'The people were in awe, "How many beautiful nice clothes there are!"' (Zirun, habihanno:7)

(31) Nes-ä r-aᶜq'u besuro-bi r-iqir-si-ƛin Ø-ezu!
DEM.I-ERG n1PL-many fish-PL.ABS.n1PL n1PL-get-PST.WIT I-look.IMPER
'How many fish he caught!' (lit.: look that he caught many fish)

Complements of factive verbs in Tsez are introduced by the quotative –*ƛin*, but that marker also introduces a wide range of other finite complement clauses; there is no evidence to show that exclamatives are similar to factive complements in any special way (cf. (1e) above).

Finally, exclamative constructions can include the emphatic particle –*wa*, which appears on the word immediately preceding the verb, regardless of that word's constituency. For example, in (32), -*wa* appears on the pivot of an existential; in (33), it appears on the subject; in (34), on one constituent of a complex verb:

(32) Gulu-ƛa *pro* b-iqi-s, idu r-ac'-a
horse.ABS.III-TOP GEN1 III-be.gotten-PST.WIT home IV-eat.TR-INF
šebin-wa ānu!
thing.ABS.IV-EXCL be.PRS.NEG
'A horse, he got, but there is nothing to eat at home!' (Imnajšvili 1963:273)

(33) Oh dice di-wa akił-ä!
oh how.much 1SG.ABS-EXCL get.tired-PST.INTERR
'Oh how tired I am!'

(34) Oh nedur łočyaƛ'-wa k'oƛi-x debi esiw!
wow so dancing-EXCL run-PRS 2SG.GEN1 sibling.ABS.I
'How well your brother dances!'

[2] See Kalinina (2011) for the use of verbs 'see' and 'look' as exclamative markers in other Dagestanian languages.

Part 3: Sentences

Complement clauses
Relative clauses
Adverbial clauses
Clausal coordination: The linking of finite clauses

Complement clauses

1 General remarks

Tsez exhibits the following main types of clausal complements (see also CH. YY[NMLZ]):

(1) Types of clausal complements
- a. restructuring constituents
- b. infinitival clauses
- c. masdar clauses
- d. nominalized clauses with the suffix *–łi*
- e. finite complement clauses introduced with the quotative enclitic *-λ̌in*

Clausal complements always belong to gender IV, as do abstract nouns derived with the suffix *–łi* (see also CH. YY[GENDER] and CH.YY [ARG STR]).

A small number of modal and aspectual verbs do not combine with noun phrase arguments and co-occur only with clausal complements. Aside from these verbs, discussed in sections 2 and 3, all verbs capable of combining with a clausal argument also permit nominal arguments in the same structural position. For example, the verb 'forget' can take a clausal complement or a noun phrase complement:

(2) [Ac ħiš-a] šuλ̌'är-no!
door.ABS.II close-INF forget-PROH
'Don't forget to close the door!'

(3) Reka-bi šuλ̌'är-no!
key-PL.ABS.nIPL forget-PROH
'Don't forget the keys!'

Modal verbs represent typical restructuring predicates, presented in section 2 of this chapter. Modal and aspectual verbs also take infinitival complements, which will be discussed in section 3. Section 4 presents verbs that take control complements, which can be expressed by infinitival or masdar clauses; these verbs include aspectual verbs, 'try', 'remember', 'forget', 'promise', 'hope', 'fear', 'agree', 'refuse', 'decide', 'teach', etc. Section 5 introduces verbs that take nominalized complements in *–łi*; these verbs are exclusively verbs of perception and cognition. In section 6, we present and analyze verbs that take clauses marked by the quotative *–λ̌in*, probably the largest group of clausal-complement-taking verbs, with verbs of speech and propositional attitude most prominent in that group.

Some verbs can take more than one type of clausal complement; for example, *šuλ̌'ir-* 'forget' (causative of *šuλ̌'-*) takes infinitival/masdar complements, as shown in (2) above, but it also takes quotative complements, just like its English counterpart (*forget to* and *forget that*). The verb AGR-*oq-* presents a particularly complex picture. As we saw in CH.YY [ARG STR], AGR-*oq-* combines with a predicative complement to form a complex predicate. In this use, we translate

the verb as 'become' for consistency, although the meanings 'happen' or even 'be' are also possible. Combining with an infinitive, AGR-*oq*- means 'begin' and functions as a raising or control verb. This function is discussed in sections 3 and 4. Finally, in combination with a converb, AGR-*oq*- has the modal meaning 'be able to; can' (as shown in section 2). It is possible that several verbs AGR-*oq*- exist in the Tsez lexicon, each with its own meaning ('become; be', 'begin', 'be able to'), related to the others only diachronically. Alternatively, one could imagine a single verb whose different interpretations are determined by the categories it combines with: with a predicative complement, it is a light verb; with an infinitival clause, it is a raising or control verb; with a masdar clause, it is unambiguously a control verb; with a converb, it functions as a modal.

Researchers face similar dilemmas in descriptions of familiar languages such as English: is there one verb 'begin', or two (Perlmutter 1970)? We will proceed without taking a stand on this issue, but for expository reasons, we will be glossing the different uses of AGR-*oq*- differently, as 'can' (under restructuring), 'become' (as a raising verb), and 'begin' (as a control verb).

AGR-*oq*- is not the only highly polysemous verb found in Tsez. AGR-*et-,* which can be either a restructuring predicate or a complement-clause-taking predicate, has several meanings: 'want', 'like', 'love'. However, only in the meaning 'want' can it function as a complement-clause-taking or restructuring verb. This is unsurprising, as cross-linguistically, it is quite common for 'want' to appear as a restructuring predicate (Aissen and Perlmutter 1983; Cinque 2006: 57-60, 103; den Dikken 2004; Givón 2009: Ch. 4; Wurmbrand 2004, 2007, a.o.).

2 Restructuring constructions

Restructuring (also known as "clause union" in Relational Grammar) is a process that unites two clauses to yield a single complex predicate consisting of two (or more) verbs, not necessarily in the same form. The selecting (highest) verb in the resulting monoclausal structure is often a modal or an auxiliary of some kind; this verb is the only one that can assume grammatical markings of finiteness, such as tense or polarity. The verbs in the complex predicate share their arguments, and the entire clause can have only one tense specification. The uniqueness of tense specification separates restructuring predicates from predicates that take clausal complements and form biclausal structures. However, as we already mentioned, several verbs can appear both as restructuring light verbs and as a complement-clause-taking verbs.

The restructuring verbs are the modal AGR-*ay*- 'must'; the modal AGR-*äsu*- 'may'; the verb AGR-*oq*- in the modal meaning 'can, be able to' (co-occurring with a converb);[1] the complex modal *behizi* AGR-*oq*- 'can; be allowed to'; the verb AGR-*ič*- in the meaning 'continue'; the verb *xec*- 'leave; allow'; the verb AGR-*et*- in the meaning 'want'; and the specialized use of the verb AGR-*esu*- 'appear' in conditionals. Of these, the modals AGR-*āy*-, AGR-*äsu-,* and *behizi* AGR-*oq*- 'can' seem to be the only Tsez verbs that do not combine with non-clausal arguments.

[1] Inability is often expressed by the complex verb *ħal ānu*, literally "strength not-be", which can take an infinitival or masdar relative clause; see CH. YY [Relative clauses] for masdar relative clauses.

The use of AGR-*ay*- ‘must’ is illustrated in the following examples:

(4) Es-na-za-s daʕba b-oq-a b-āy-inč’i.
sibling-PL-OS-GEN1 dispute.ABS.III III-become-INF III-must-PRS.NEG
‘Siblings should not quarrel.’ (lit.: siblings’ dispute must not happen)

(5) Ža debi reƛ’iqoy bat’iyaw-tow-ä r-ič-a r-āy-x?
DEM 2SG.GEN1 glove.ABS.IV different-FOC-INTERR IV-stay-INF IV-must-PRS
‘This glove of yours must be really special, mustn't it?’ (Xanes łʿono užin, sis kidno:30)

(6) El-ä paprus ƛis-a r-āy-inči.
1PL-ERG cigarette.ABS.IV pull-INF IV-must-PRS.NEG
‘We must not smoke.’

The verbs AGR-*äsu*- ‘may’ and AGR-*esu* (in the conditional form) represent specialized uses of the verb AGR-*esu* ‘be found; appear’, although it is unlikely that the regular and specialized uses of this verb are synchronically perceived as connected. AGR-*äsu*- ‘may’ appears only as a restructuring verb, while the conditional AGR-*esu* can also take clausal complements with the quotative -*ƛin*. This latter construction will be discussed later in this chapter (see also CH.YY[ADJUNCT cl}).

(7) Ža ša ʕaqʿu-ro-s maħ yoł-äsi b-oq-no
DEM wine.ABS.III urine-OS-GEN1 smell.ABS.III be.PRS-RES III-become-PFV.CVB
b-äsu.
III-may
‘This wine may have acquired the smell of urine.’ (lit.: this wine may have become one where the urine smell exists) (Xanno, nesisgon łʿono užin:82)

(8) Neła-s kaɣat šuƛ’i-n y-äsu debe-r.
DEM.nI-GEN1 letter.ABS.II forget-PFV.CVB II-may 2SG-LAT
‘You possibly forgot her words.’

(9) Irbahin-e-r yedu ħalt’i b-eti-x b-äsu.
Ibrahim-OS-LAT DEM work.ABS.III III-like-IPFV.CVB III-may
‘Ibrahim may like this work.’

(10) Debe-r ža y-iy-xo y-äsu-nč’i.
2SG-LAT DEM.ABS(.II) II-know-IPFV.CVB II-may-PST.NEG
‘You may not have known her.’

(11) Irbahin-ä yedu ħalt’i b-odi-n b-äsu.
Ibrahim-ERG DEM work.ABS.III III-like- PFV.CVB III-may
‘Ibrahim may have done this work.’

(12) Mi y-ik’i-n y-esu-näy…
2SG.ABS(.II) II-go-CVB II-appear-COND.CVB
‘Assuming you go…’ (to a female addressee)

(13) Meži dä-ƛ’ bužzi b-oq-xo
2PL.ABS.(IPL) 1SG-SUPER.ESS trust IPL-become-IPFV.CVB
b-esu-nč’i-näy…
IPL-appear-NEG-COND.CVB
‘If you don’t believe me…’ (ʕAliqilič:104)

The restructuring use of AGR-*oq*- as 'can, be able to' and AGR-*ič*- 'stay' is limited to combinations with converbs; when used with infinitives, these verbs take a clausal complement (see sections 3 and 4).

(14) Neła k'et'-ä aw b-iqir-xo b-oq-n-ānu.
DEM.nI cat-ERG mouse.ABS.III III-catch-IPFV.CVB III-can-PST.nWIT-NEG
'That cat could not catch a mouse.'

(15) Paraxataw ʕumru b-odi-n b-iči-x nes-ä.
quiet life.ABS.III III-do-PFV.CVB III-stay-PRS DEM.I-ERG
'He led a quiet life.'

(16) Ražbadin halmaɣ-qo-r Ø-ezu-n Ø-iči-x.
Rajbadin.ABS.I friend-POSS-LAT I-look.for-PFV.CVB I-stay-PRS
'Rajbadin keeps waiting for his friend.' (Ražbadinno Tawadin:73)

(17) Xex-z-ä xabar teq-er-no b-ič-ix.
child-OS-ERG story.ABS.III hear-CAUS-PFV.CVB III-stay-PRS
'The children kept listening to a/the story.'

All the verbs we have discussed so far inherit the subcategorization frame of the verb with which they form a complex predicate. For instance, in (9), AGR-*äsu* is part of a complex predicate that takes a lative experiencer and an absolutive stimulus, whereas in (11), it belongs to a regular transitive predicate that takes an ergative agent and absolutive patient. These case frames are determined by the verbs AGR-*et*- 'want' and AGR-*od*- 'do, make', respectively.

The following verbs retain their own case frame when combining with a converb or an infinitive: *xec*- 'leave; allow', *behizi* AGR-*oq*- 'can; be allowed to', and AGR-*et*- 'want'.

The transitive verb *xec*- 'leave' is commonly used with regular noun phrases in the meaning 'leave', as illustrated in (18), or in the meaning 'cross, pass':[2]

(18) Sis-tow sis t'eka xeci-n yiz-ä xizor.
one-FOC one billy.goat.ABS.III leave-PST.nWIT DEM.nIPL-ERG behind
'They had kept only one billy goat.' (C'irdux:19)

As a restructuring verb, *xec*- bears the meaning 'let; allow'. It combines with converbs, mostly the perfective converb, and contributes a telic interpretation. In its restructuring use, it takes the ergative subject and shares the absolutive object with its converb.

[2] The verb *xec*- with a noun phrase complement is used as a story-opener in traditional texts:

(i) Esi-n šebi xeci-n šebi….
tell-PST.nWIT what.ABS.IV leave-PST.nWIT what.ABS.IV
'Once there was, once there was not…' (lit.: what [they] told, what [they] left out)

(19) Yił-ä … *pro* b-eynod-a b-egir-no xeci-n.
DEM.nI-ERG ABS.IPL IPL-work-INF IPL-send-PFV.CVB leave-PST.nWIT
'She had allowed them to work.' (lit.: left them sent to work) (C'irdux:16)

(20) *pro* yedu-kin b-exu-r-inč'ey xec-ā-č'in.
ERG DEM(.III)-FOC III-die-CAUS-PFV.CVB.NEG leave-FUT.DEF-NEG
'I will at least have killed it.' (lit.: won't leave not having killed it) (Ceyes sayɣat:4)

The complex modal *behizi* AGR-*oq*- 'can; be allowed to' (*behizi* is the Avar verb 'be possible') combines with infinitival complements and conveys general ability or permission; as such, it permits both a deontic and an epistemic interpretation. It always takes the presumed agent in the poss-essive, for instance:

(21) a. Nesi-q ža t'ek y-is-a behizi
DEM.I-POSS.ESS DEM book.ABS.II II-take-INF possible
y-oq-inč'i.
II-become-PRS.NEG
'He is not allowed to take this book.'

b. *Nes-ä ža t'ek y-is-a behizi
DEM.I-ERG DEM book.ABS.II II-take-INF possible
y-oq-inč'i.
II-become-PRS.NEG

(22) Nex-a behizi y-äq-ä?
come-INF possible II-become.FUT-INTERR
'Can I come in?' (a woman speaking)

(23) Q'ˤuy-z-i-x *pro* y-ik'-a behizi y-äq-inč'i.
other-ATTR.OBL-OS-AD.ESS ABS.II II-go-INF possible II-become.FUT-NEG
'She cannot marry another man.' (Bilq'isdi:44)

The restructuring verb AGR-*et*- 'want' combines with infinitives and always takes the experiencer in the lative form, even if the verb it combines with requires an ergative subject, as in (26) below.

(24) Kid-be-r yedu t'ek y-is-a y-eti-x-ānu.
girl-OS-LAT DEM book.ABS.II II-take-INF II-want-PRS-NEG
'The girl does not want to buy this book.'

(25) Debe-r xabar b-iy-a b-eti-x-ä?
2SG-LAT story.ABS.III III-know-INF III-want-PRS-INTERR
'Do you want to know the story/the news?'

(26) Elu-q-or xabar b-egir-a b-eti-x nesi-r/*nes-ä/*ža.
1PL-POSS-LAT news.ABS.III III-send-INF III-want-PRS DEM.I-LAT/DEM.I-ERG/DEM.ABS
'He wants to tell us the story/the news.' (lit.: send us the story/news)

All the restructuring verbs register agreement, and their agreement must match the agreement on the lower verb (see CH.AGR and some discussion below).

Restructuring verbs differ from complement-clause-taking verbs in that they are able to select a wider range of verb forms than those listed in (1); in particular, they select not only infinitives, as in (4) through (6) and (22) through (26), but also perfectives ((7), (8), (11), (12), (15), (16), (17), (19), (20)) and imperfectives ((9), (10), (13), (14)) as converbs. Table 1 summarizes the basic properties of restructuring predicates.

Table 1. Restructuring predicates and their distributional properties

Highest verb	**Meaning**	**Selected non-finite form**	**Case assignment determined by**
AGR-*āy*	'must'	Infinitive	Lower verb
AGR-*äsu*	'may'	Perfective/imperfective converb	Lower verb
AGR-*esu*-COND	'assuming; if'	Perfective/imperfective converb	Lower verb
AGR-*oq*-	'can, be able to'	Perfective/imperfective converb	Lower verb
AGR-*ič*-	'continue, keep at'	Perfective/imperfective converb	Lower verb
xec-	'leave; stop'	Perfective/imperfective converb	Higher (light) verb
behizi AGR-*oq*-	'can, be allowed to'	Infinitive	Higher (light) verb
AGR-*et*-	'want'	Infinitive	Higher (light) verb

When a restructuring predicate appears in a main clause, word order is no more constrained than it is in regular clauses with non-complex predicates. In addition, the verbs that comprise the restructuring predicate can be separated from each other. We will first illustrate the freedom of word order in restructuring clauses with an uninterrupted predicate. Consider the permutations of word order available for examples (8) and (24):

(27) a. Neła-s kaɣat šuƛ'i-n y-äsu debe-r.
DEM.nI-GEN1 letter.ABS.II forget-PFV.CVB II-may 2SG-LAT (OVS)

b. Debe-r šuƛ'i-n y-äsu neła-s kaɣat.
2SG-LAT forget- PFV.CVB II-may DEM.nI-GEN1 letter.ABS.II (SVO)

c. Debe-r neła-s kaɣat šuƛ'i-n y-äsu.
2SG-LAT DEM.nI-GEN1 letter.ABS.II forget-PFV.CVB II-may (SOV)

d. Neła-s kaɣat debe-r šuƛ'i-n y-äsu.
DEM.nI-GEN1 letter.ABS.II 2SG-LAT forget- PFV.CVB II-may (OSV)

e. Šuƛ'i-n y-äsu neła-s kaɣat debe-r.
forget-PFV.CVB II-may DEM.nI-GEN1 letter.ABS.II 2SG-LAT (VOS)

f. Šuƛ'i-n y-äsu debe-r neła-s kaɣat.
forget-PFV.CVB II-may 2SG-LAT DEM.nI-GEN1 letter.ABS.II (VSO)

'You possibly forgot her words.'

(28) a. Kid-be-r yedu t'ek y-is-a y-eti-x-ānu.
girl-OS-LAT DEM book.ABS.II II-take-INF II-want-PRS-NEG (SOV)

b. Yedu t'ek kid-be-r y-is-a y-eti-x-ānu.
DEM book.ABS.II girl-OS-LAT II-take-INF II-want-PRS-NEG (OSV)

c. Kid-be-r y-is-a y-eti-x-ānu yedu t'ek.
girl-OS-LAT II-take-INF II-want-PRS-NEG DEM book.ABS.II (SVO)

d.	Yedu	t'ek	y-is-a	y-eti-x-ānu		kid-be-r.	
	DEM	book.ABS.II	II-take-INF	II-want-PRS-NEG		girl-OS-LAT	(OVS)
e.	Y-is-a	y-eti-x-ānu	kid-be-r	yedu	t'ek.		
	II-take-INF	II-want-PRS-NEG	girl-OS-LAT	DEM	book.ABS.II		(VSO)
f.	Y-is-a	y-eti-x-ānu	yedu	t'ek	kid-be-r.		
	II-take-INF	II-want-PRS-NEG	DEM	book.ABS.II	girl-OS-LAT		(VOS)

'The girl does not want to buy this book.'

The following examples, related to (4) and (24), show that the verbs in the complex predicate can be separated by intervening material and can appear in a different order:

(29)	a.	Es-na-za-s	daʕba	b-āy-inč'i	b-oq-a.
		sibling-PL-OS-GEN1	dispute.ABS.III	III-must-PRS.NEG	III-become-INF
	b.	Es-na-za-s	b-oq-a	daʕba	b-āy-inč'i.
		sibling-PL-OS-GEN1	III-become-INF	dispute.ABS.III	III-must-PRS.NEG

'Siblings should not quarrel.'

(30)	a.	Kid-be-r	yedu	t'ek	y-eti-x-ānu	y-is-a.
		girl-OS-LAT	DEM	book.ABS.II	II-want-PRS-NEG	II-take-INF
	b.	Y-eti-x-ānu	kid-be-r	y-is-a	yedu	t'ek.
		II-want-PRS-NEG	girl-OS-LAT	II-take-INF	DEM	book.ABS.II

'The girl does not want to buy this book.'

When a restructuring clause is embedded, only verb-final orders are possible, and the light verb must appear last. Compare the grammatical (29a), with a restructuring predicate in the main clause, and the ungrammatical (31b,c):

(31)	a.	Mežu-r	r-iy-x	esna-za-s	daʕba	b-oq-a
		2PL-LAT	IV-know-PRS	sibling-OS.PL-GEN1	dispute.ABS.III	III-become-INF
		b-äy-inč'-ru-łi.				
		III-must-NEG-PST.PTCP-NMLZ				
		'You know that siblings should not quarrel.'				
	b.	*Mežu-r	r-iy-x	esna-za-s	daʕba	
		2PL-LAT	IV-know-PRS	sibling-OS.PL-GEN1	dispute.ABS.III	
		b-äy-inč'-ru-łi		b-oq-a.		
		III-must-NEG-PST.PTCP-NMLZ		III-become-INF		
	c.	*Mežu-r	r-iy-x	esna-za-s	daʕba	
		2PL-LAT	IV-know-PRS	sibling-OS.PL-GEN1	dispute.ABS.III	
		b-āy-inč'i	b-äq-ru-łi.			
		III-must-NEG	III-become-PST.PTCP-NMLZ			

Restructuring clauses denote events that are perceived as unitary. Accordingly, restructuring clauses can have only one adverbial quantification and only one temporal specification. For example, the following sentence can only mean that someone had an obligation to make two key turns or to lock two locks on the same door, not that he had two separate obligations to close the door.

(32) K'ox nes-ä ac y-uq-a y-āy-x
twice DEM.I-ERG door.ABS.II II-close-INF II-must-IPFV.CVB
zow-s.
AUX.PST-PST-WIT
'He had to close the door twice.'
NOT: 'Twice, he had to close the door.'

Likewise, the following sentences are ungrammatical because they attribute two separate temporal specifications to the subevents expressed by the restructuring predicate:

(33) *ħak'o ɣude b-od-ani-x žaq'ˤuł b-ay-x
dumpling.ABS.III tomorrow III-do-MSD-AD.ESS today III-must-PRS
eni-y-ä.
mother-OS-ERG
('Today mother has the obligation to make dumplings tomorrow.')

(34) *Žaq'ˤuł kid-be-r yedu t'ek ɣude y-is-a
today girl-OS-LAT DEM book.ABS.II tomorrow II-take-INF
y-eti-x-ānu.
II-want-PRS-NEG
('Today the girl does not want to buy this book tomorrow.')

Negation is possible on either verb, with a slight variation in interpretation. Below, (35a) means that it is desirable for Father to not eat sugar, while (35b) means that Father is not allowed to eat sugar. Only the latter kind of negation takes scope over the entire restructuring predicate:[3]

(35) a. Babi-y-ä čakar b-ac'-āč'i-ni-x b-āy-x.
father-OS-ERG sugar.ABS.III III-eat.TR-NEG-MSD-AD.ESS III-must-PRS
'Father must avoid sugar.' (must [not eat] sugar)

b. Babi-y-ä čakar b-ac'-ani-x b-āy-nč'u.
father-OS-ERG sugar.ABS.III III-eat.TR-MSD-AD.ESS III-must.FUT-NEG
'Father must not eat sugar.'

These properties become important in disentangling the monoclausal use of AGR-*āy*- and AGR-*et*- from their use in biclausal constructions, where they take a clausal complement. We will turn to this use in the next section. First, however, we will discuss coordination of restructuring verbs.

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[3] Negation in Tsez is not uncommon in nominalizations and infinitival/masdar clauses, and it receives a different interpretation in such instances than it does in finite contexts. Thus, sentences such as (35a) are in principle possible; however, there is a preference in such cases to treat AGR-*āy* as a matrix verb and the whole structure as biclausal. This leads to a different agreement pattern on the matrix verb. In (i), the embedded clause headed by the masdar is an argument of the modal and it agrees with the masdar clause in gender IV.

(i) Babi-y-ä čakar b-ac'-āč'i-ni-x r-āy-x.
[father-OS-ERG sugar.ABS.III III-eat.TR-NEG-MSD-AD.ESS].IV IV-must-PRS
'Father must avoid sugar.' (must [not eat sugar])

Coordination of finite verbs in Tsez is virtually unknown; occasional paratactic coordinations are observed, but finite coordination with the standard enclitic *–n(o)* 'and', which coordinates all other categories, is not possible. In order to express something like, 'Am I allowed and do I have to come in?', one restructuring predicate remains finite and the other attaches to it in an adjunct clause. However, such adjunction renders the sentence ambiguous, as shown in the two interpretations of (36) and (37): either the entire event is questioned (i), or just the event expressed in the main clause is questioned (ii).

(36)	(Nex-a)	behizi	y-oq-no	di	nex-a
	come-INF	possible	II-become-PFV.CVB	1SG.ABS(.II)	come-INF
	y-āy-ä?				
	II-must-INTERR				
	(i) 'Am I allowed and do I have to come in?'				
	(ii) 'Since I am allowed to, do I have to come in?'				
(37)	Dä-r	nex-a	r-eti-n	di	nex-a
	1SG-LAT	come-INF	IV-want-PFV.CVB	1SG.ABS(.II)	come-INF
	behizi	y-oq-ä?			
	possible	II-become-INTERR			
	(i) 'Do I want and am I allowed to come in?'				
	(ii) 'Since I want to, can I come in?'				

Even if the coordinated restructuring predicates use the same light verb, they still need to appear separately. This is illustrated in (38), where one of the conjoined predicates appears as a converb. In (38a), the absolutive *Pat'i* is interpreted as belonging with the adjoined converbal clause, while the ergative *Pat'ä* is part of the main clause. The converbal adjunct is center embedded between that ergative and the rest of the clause:[4]

(38)	a.	Pat'i$_i$/Pat'-ä$_i$	idu-r	oč'ira-ƛ'o-r	y-ay-a	
		Fatima.ABS.II/Fatima-ERG	home-LAT	nine.OBL-SUPER-LAT	II-come-INF	
	y-āy-n	*pro*$_i$	t'ek	t'et'r-a	y-āy-x.	
	II-must-PFV.CVB	ERG	book.ABS.II	read-INF	II-must-PRS	
	b.	*pro*$_i$	idu-r	oč'ira-ƛ'o-r	y-ay-a	
		Fatima.ABS.II	home-LAT	nine.OBL-SUPER-LAT	II-come-INF	

[4] Alternatively, the first conjunct can be adjoined as a converbal clause, and the modal retained only in the main clause. Such sentences are scopally ambiguous; the modal may scope over the main predicate (a) or over the whole sentence (b):

(i)	[Pat'-ä$_i$	cen-no	r-is-no]	*pro*$_i$	idu-r
	Fatima-ERG	dairy.ABS.IV-and	IV-take-PFV.CVB		home-LAT
	oč'ira-ƛ'o-r	y-ay-a	y-āy.		
	nine.OBL-SUPER-LAT	II-come-INF	II-must		
	(a) 'Fatima will have bought dairy products and must be home by nine.'				
	(b) 'Fatima must, having bought dairy products, be home by nine.'				

y-āy-n	Pat’-ä$_i$	t’ek	t’et’r-a	y-āy-x.
II-must-PFV.CVB	Fatima-ERG	book.ABS.II	read-INF	II-must-PRS

‘Fatima must be home by nine and must read a book.’

3 Biclausal structures with infinitival complements: Impersonal and raising constructions

3.1 General remarks

A number of one-place predicates can take an infinitival clausal complement. Such predicates typically have evaluative semantics. For example,

(39)

[C’i	er-a]	onoč-a-r	isał-xo	zow-n.
fire.ABS.IV	put-INF	hen-OS-LAT	be.difficult-IPF.CVB	AUX.PST-PST.nWIT

‘It was hard for the hen to light a fire.’ (Onočun, mamalayn:4)

Although there are many verbs with a dedicated intransitive suffix *–ł-*, they typically do not have evaluative meaning and do not combine with clausal arguments (an exception is the verb *isał-* ‘be difficult’). Instead, many evaluative predicates are formed by combining a predicative complement and an intransitive light verb ‘be’ or ‘become’ (see CH. ARG STR and AGRee). For example:

(40)

[Paprus	ƛis-a]	ħaramaw[5]	(yoł).
cigarette.ABS.IV	pull-INF	harmful	be.PRS

‘Smoking is harmful.’ (lit.: to smoke cigarettes is ....)

(41)

[ʕaraq’i	ħaƛ-a]	ħaramaw	r-iči-x.
booze.ABS.III	drink-INF	harmful	IV-stay-PRS

‘To drink alcohol continues to be harmful.’

(42)

[Q’olħo	eƛ-ani-x]-no		[zaryadka	
ball.ABS.III	perform-MSD-AD.ESS-and		physical.exercise.ABS.III	
b-od-ani-x]-no		r-igu	yoł	saxłi-mo-r.
III-do-MSD-AD.ESS-and		IV-good	be.PRS	health-OS-LAT

‘It is good for one's health to play ball and do regular physical exercise.’

(43)

[Xan-zo	meč-ā-r	Ø-iz-ani-r]	xan-ƛ’-āy	
king-GEN2	place-IN-LAT	I-rise-MSD-LAT	king-SUPER-ABL	
c’aqaw-z-i-r		mumpaʕataw	ānu.	
superior-ATTR.OBL-OS-LAT		useful	be.PRS.NEG	

‘It is useless for the one who is better than the king to rise to the royal position.’
(based on Bokarev 1959: 212)

In addition to their occurrence with evaluative predicates, a number of verbs can also appear with infinitival (but not with masdar) complements; these include AGR-*oq*- ‘become’, the complex modals *behizi* AGR-*oq*- ‘can; be allowed; be permitted’ and *k’^{w}eze* AGR-*oq*- ‘can; be able to’,

[5] The adjective *ħaramaw* is derived from the Arabic word *haraam* ‘forbidden’.

the modal AGR-*āy*, and the aspectual verbs AGR-*ič*- 'stay; continue', *łiy*- 'stop', and *xec*- 'stop, leave behind'. The resulting structure is illustrated in (44) for 'stop' and in (45) for 'be able to'. Most of these verbs also function as restructuring predicates, which were discussed in section 2; we will address the differences between these two uses below. Restructuring verbs can combine with converbs, whereas a clausal complement in a biclausal construction cannot have a converbal predicate. This distribution limits the possible ambiguity between restructuring and complement-clause-taking verbs.

(44)	[Isi	y-ay-a]	łiy-si.		
	snow.ABS.II	II-come-INF	stop-PST.WIT		
	'It stopped snowing.'				
(45)	Dä-q	k'^{w}eze	r-āq	[saʕat-y-ā-r	oc'ino
	1SG-POSS.ESS	able	IV-become.FUT	hour-OS-IN-LAT	ten
	kilometra	xec-a].			
	km	leave-INF			
	'I can run (lit.: leave behind) ten kilometers in an hour.'				

A question arises: do clausal arguments with an infinitive/masdar predicate appear in subject position, or are they extraposed in an impersonal-type construction with a null pronominal in subject position? This latter scenario would make the construction similar to the English translations with the impersonal *it*. (46) presents a schematic representation of this contrast: (46a) shows a clausal subject structure, and (46b), an impersonal structure, with a silent expletive pronoun in the subject position:

(46)	a.	[ʕaraq'i	ħaƛ-a]	ħaramaw	r-iči-x.	
		booze.ABS.III	drink-INF	harmful	IV-stay-PRS	
		SUBJECT		PREDICATE		
		'To drink alcohol continues to be harmful.'				
	b.	*pro*	[ʕaraq'i	ħaƛ-a]	ħaramaw	r-iči-x.
		ABS.IV	booze.ABS.III	drink-INF	harmful	IV-stay-PRS
		SUBJECT	EXTRAPOSED COMPLEMENT		PREDICATE	
		'It continues to be harmful to drink alcohol.'				

We have touched on this issue in CH. YY[ARG structure], where we offered some considerations in support of the impersonal structure in (46b); in particular, we noted in this connection that clausal subjects in the ergative position are impossible.

Cross-linguistically, modals and aspectual verbs often have an impersonal use, so (46b) is also feasible from the typological standpoint, at least for some of the verbs listed above. The analysis is also realistic in light of the fact that, as we show below, the modals found in biclausal structures are typically epistemic, a trend that is also common for impersonal and raising predicates. In the rest of this chapter, we will refer to verbs that combine with infinitival complement clauses as "impersonal." This "impersonal" use will be contrasted to the use of a subset of such verbs as raising predicates (section 3.3) and as control predicates (section 4).

Infinitival clauses must occur as complements to the higher verb in the complex predicate; as such, their position with respect to the verb is quite free. As long as the internal integrity of the complement is preserved (see (53) below), it can appear to the left or to the right of the predicate. The placement is determined by information-structural considerations and often by the size of the complement; longer complements tend to be placed at the left sentential periphery.

As example (42) shows, complements embedded under the same verb can be coordinated, which introduces yet another dimension of difference between complement-clause-taking verbs and restructuring verbs.

3.2 Impersonal constructions with infinitival complements

3.2.1 Clauses with complement-clause-taking modal verbs

In addition to forming monoclausal structures, AGR-*āy* can also take an infinitival clausal complement, producing a biclausal structure. Compare (47) and
(48), which on the surface differ only in agreement; in (48), the modal takes gender IV marking, thus agreeing with the enire infinitival clause:

(47)	Irbahin-ä	yedu	ħalt'i	b-od-a	b-āy.
	Ibrahim-ERG	DEM	work.ABS.III	III-do-INF	III-must
	'Ibrahim must do this work.'				
(48)	[Irbahin-ä	yedu	ħalt'i	b-od-a]	r-āy.
	[Ibrahim-ERG	DEM	work.ABS.III	III-do-INF].IV	IV-must
	'Ibrahim must do this work.'				

The two sentences seem close in meaning, an issue we will return to later in this section. Structurally, however, they are different. (47) is monoclausal, with the complex verb AGR-*od*-AGR-*āy* taking an absolutive object and an ergative subject; (48), on the other hand, is biclausal: the modal AGR-*āy* takes a clausal complement, which accounts for the gender IV agreement.[6]

The difference in agreement is not the only property that separates (47) and (48). In (47), the ergative and the absolutive may appear in any order with respect to the verb (as shown in (45)), while in (48), *rāy* cannot intervene between the absolutive and the infinitive, and both noun

[6] If the absolutive noun phrase is also gender IV, it is impossible to distinguish the two readings on the basis of agreement. For example, (i) is ambiguous out of context; the verb AGR-*āy* might agree with either the noun phrase *tupi* or the clausal complement *nesä tupi caλa*. This ambiguity is reflected in the ambiguity of adverbial quantification (compare (i) with (32) above).

(i)	K'ox	nes-ä	tupi	caλ-a	r-ay-x
	twice	DEM.I-ERG	gun.ABS.IV	throw-INF	IV-must-IPFV.CVB
	zow-s.				
	AUX.PST-PST-WIT				
	'He had to shoot twice.' (two shots)				
	'Twice, he had to shoot.' (two obligations)				

phrases must precede the infinitive (below, we only show the relevant possibilities illustrating the contrast):

(49)	a.	Irbahin-ä	yedu	ħalt'i	b-od-a	b-āy.	(SOV)
		Ibrahim-ERG	DEM	work.ABS.III	III-do-INF	III-must	
	b.	Yedu ħalt'i		b-od-a	b-āy	Irbahin-ä.	(OVS)
		DEM	work.ABS.III	III-do-INF	III-must	Ibrahim-ERG	
	c.	B-āy	b-od-a	yedu	ħalt'i	Irbahin-ä.	(VOS)
		III-must	III-do-INF	DEM	work.ABS.III	Ibrahim-ERG	
		'Ibrahim must do this work.'					
(50)	a.	Irbahin-ä	yedu	ħalt'i	b-od-a	r-āy.	(SOV)
		Ibrahim-ERG	DEM	work.ABS.III	III-do-INF	IV-must	
		'Ibrahim must do this work.'					
	b.	*Yedu ħalt'i		b-od-a	r-āy	Irbahin-ä.	(OVS)
		DEM	work.ABS.III	III-do-INF	IV-must	Ibrahim-ERG	
	c.	*R-āy	b-od-a	yedu	ħalt'i	Irbahin-ä.	(VOS)
		IV-must	III-do-INF	DEM	work.ABS.III	Ibrahim-ERG	

Next, in (47), the case of the agent is fixed; it has to be ergative since the complex predicate 'must do' is transitive. The ergative in
(48), however, can alternate with a poss-essive noun phrase:

(51)	Irbahin-ä/Irbahin-qo	yedu	ħalt'i	b-od-a	r-āy.
	Ibrahim-ERG/Ibrahim-POSS.ESS	DEM	work.ABS.III	III-do-INF	IV-must
	'Ibrahim must do this work.'				

Recall that poss-essive is the form associated with potential or inadvertent agency (see CH.YY[ARG STR]). This suggests that the ergative appears when its presence is determined by the restructuring predicate or the embedded verb, and the poss-essive appears when it is called for by the matrix verb in a biclausal structure. This is represented schematically in (52).[7] Note that in (52b,c), the modal verb shows agreement with the infinitival clause in gender IV.

(52)	a.	Irbahin-ä	yedu	ħalt'i	b-od-a	b-āy.
		Ibrahim-ERG	DEM	work.ABS.III	III-do-INF	III-must
		'Ibrahim must do this work.'				RESTRUCTURING
	b.	[Irbahin-ä	yedu	ħalt'i	b-od-a]	r-āy.
		Ibrahim-ERG	DEM	work.ABS.III	III-do-INF	IV-must
		'Ibrahim must do this work.'				EMBEDDED ERG
	c.	Irbahin-qo	[yedu	ħalt'i	b-od-a]	r-āy.
		Ibrahim-POSS.ESS	DEM	work.ABS.III	III-do-INF	IV-must
		'Ibrahim must do this work.'				MATRIX CLAUSE POSS-ESS

[7] We will return to the meaning of (51) and (52c) at the end of this section.

Word order permutations support these distinctions; in (52b), the ergative cannot follow *rāy* because it is not in the main clause, but in (52c), the poss-essive easily appears in the postverbal domain.

(53) a. *[Yedu ħalt'i b-od-a] r-āy Irbahin-ä.
DEM work.ABS.III III-do-INF IV-must Ibrahim-ERG
('Ibrahim must do this work.') EMBEDDED ERG
b. [Yedu ħalt'i b-od-a] r-āy Irbahin-qo.
DEM work.ABS.III III-do-INF IV-must Ibrahim-POSS.ESS
'Ibrahim must do this work.' MATRIX CLAUSE POSS-ESS

Unlike the monoclausal restructuring constructions discussed above, biclausal sentences can include adverbials that scope either over the state of affairs expressed in the embedded clause, or over the state of affairs denoted by the matrix verb. Compare example (32) above and the corresponding biclausal examples. Example (54a) can refer to either two closings or two obligations; this ambiguity arises because *k'ox* can be interpreted either as part of the infinitival clause (54b) or as part of the matrix clause (54c):

(54) a. K'ox nes-ä ac y-uq-a r-āy-x
twice DEM.I-ERG door.ABS.II II-close-INF IV-must-IPF.CVB
zow-s.
AUX.PST-PST-WIT
'He had to close the door twice.'
'Twice, he had to close the door.'
b. [k'ox nesä ac yuqa] rāyx zows
c. k'ox [nesä ac yuqa] rāyx zows

In (55) and (56), the placement of the adverbial resolves the ambiguity; in (55) it is clearly inside the embedded clause, and in (56), in the matrix clause.

(55) [Nes-ä ac k'ox y-uq-a] r-āy-x zow-s.
DEM.I-ERG door.ABS.II twice II-close-INF IV-must-IPFV.CVB AUX.PST-PST-WIT
'He had to close the door twice.' (two closings, *two obligations)
(56) K'ox r-āy-x zow-s [nes-ä ac y-uq-a].
twice IV-must-IPFV.CVB AUX.PST-PST-WIT DEM.I-ERG door.ABS.II II-close-INF
'Twice, he had to close the door.' (two obligations, *two closings)

The differences in meaning between restructuring sentences and biclausal sentences are often very subtle, and the discussion in this chapter cannot do them justice. However, some considerations can be offered. With 'must', restructuring corresponds mainly to deontic modality, indicating a set of obligations imposed on the referent. The biclausal construction is more appropriate in the epistemic context, where it reflects the speaker's commitment to the truth of the proposition expressed in a given utterance. Since restructuring is used to express deontic modality, it is not surprising that the sentence below is judged infelicitous:

(57) #Mi oč'ira-ƛ'o-r idu-r y-ay-a

2SG.ABS(.II) nine.OBL-SUPER-LAT home-LAT II-come-INF
y-āy-x/y-āy.
II-must-PRS/II-must.FUT
("You must come home at nine.")

The biclausal equivalent of (57) is judged fully acceptable, as it corresponds to the epistemic reading just like the corresponding English *must* in the translation*:*

(58) Mi oč'ira-ƛ'o-r idu-r y-ay-a
2SG.ABS(.II) nine.OBL-SUPER-LAT home-LAT II-come-INF
r-āy-x/r-āy.
IV-must-PRS/IV-must.FUT
'You must come home at nine.'

A deontic interpretation requires that the participant responsible for a given event be volitional or sentient; hence the correlation between deontic readings of modals and the use of control structures. No such requirement is observed with epistemic readings. If we now consider the subject idioms discussed in CH. YY[ARG STR], we find that they are impossible with restructuring 'must' but acceptable with clausal-complement-embedding 'must'. Thus, the idiomatic expression *ziru ƛuƛix* loses its non-compositional meaning under restructuring but retains it in the biclausal example below:

(59) a. Ziru [ƛuƛ-a] b-āy.
fox.ABS.III give.birth-INF III-must
'The fox had/has to give birth.' (odd but acceptable)
NOT: 'There must be a sun shower.' (completely impossible)
b. [Ziru ƛuƛ-a] r-āy.
[fox.ABS.III give.birth-INF].ABS.IV IV-must
'A sun shower (clear-sky hail) must be happening.'

Further evidence for the deontic:monoclausal/epistemic:biclausal distinction comes from the acceptability of these two interpretations in conditional clauses. The deontic reading is appropriate in such clauses, but the epistemic reading is odd (see Papafragou 2006 for a discussion and further references therein):

(60) Uži-bi idu b-ič-a b-āy-näy eniw
boy-PL.ABS.IPL at.home IPL-stay-INF IPL-must-COND mother.ABS.II
woxzi y-oq-as.
joyful II-become-FUT
'If the boys have to be home mother will be happy.' (it is the boys' obligation to be home)

(61) #Uži-za-q howži idu b-ik'-a r-ay-näy
boy-OS.PL-POSS.ESS now at.home IPL-go-INF IV-must-NEG-COND
eniw woxzi y-oq-as.
mother.ABS.II joyful II-become-FUT
'If it must be the case that the boys are home now mother will happy.'

Since epistemic modality deals with the speaker's assessment of the proposition expressed by a given utterance, such assessment cannot be reported as a factual statement. As a result, epistemic modals cross-linguistically resist appearing in the complements of factive predicates. Tsez data are consistent with this generalization; consider (62), where 'must' agrees with the entire infinitival clause in gender IV. This and similar examples are judged odd:

(62) #[[Yiła q'arza nesi-z rok'-ƛ'o b-ay-r-a]
DEM debt.ABS.III DEM.I-GEN2 heart-SUPER.ESS III-come-CAUS-INF
r-äy-ru-łi] ʕažaibaw (yoł).
IV-must-PST.PTCP-NMLZ suprprising be.PRS
'It is surprising that he must remember this debt.'

Since epistemic modals express the speaker's commitment to and assessment of a given proposition, clauses with such modals can include the mention of a referent that stands to benefit from the state of affairs expressed in the relevant utterance. In other words, if the current state of affairs is such that Ibrahim wins the race, then that outcome may be good for himself, for his team, for his coach, etc. The beneficiary of the event is expressed in Tsez by a noun phrase in the poss-essive, as in (51) and (52c) above. In this particular example, the beneficiary and the agent are the same person, but that does not have to be the case. Consider the following example, where the beneficiary is the coach, expressed by a poss-essive noun phrase, and the agent of the embedded infinitival clause is Ibrahim, expressed by an ergative noun phrase:

(63) Terenir-qo [irbahin-ä berhenłi r-iqir-a] r-āy-x.
coach-POSS.ESS Ibrahim-ERG victory.ABS.IV IV-catch-INF IV-must-PRS
'It must be good for the coach that Ibrahim wins.'

If we now revisit (51) with the beneficiary construal in mind, it can be interpreted as "It must be good for Ibrahim to do this work," a reading that is again in keeping with the epistemic meaning 'must'.

The distribution of the deontic and epistemic meanings of AGR-*āy* in Tsez is of general interest because it does not quite match the accepted cross-linguistic pattern whereby deontic modality is expressed by control structures, and epistemic modality, by raising structures. Here we find deontic modality linked to restructuring, and epistemic modality to the impersonal biclausal construction. The two modalities still exhibit a structural contrast, but the specific mechanism of contrast differs cross-linguistically.

The complex modal *behizi* AGR-*oq*- 'can; be allowed to' is sometimes used as an impersonal verb, in which case its agreement pattern is fixed in gender IV: *behizi roq*-. Its impersonal use is not common, and it seems that the restructuring construction is preferred. It is often used in the set phrases below, which do not have an overt complement. The presupposed clausal argument in these sentences could be either a noun phrase or an infinitival complement.

(64) a. Behizi r-āq.
possible IV-become.FUT

'That's fine.'/ 'That's allowed.'

b. behizi r-oq-näy…
possible IV-become-COND.CVB
'if possible…'

3.2.2 Clauses with other complement-clause-taking intransitive verbs

Other verbs that take infinitival clausal complements include the aspectual verbs AGR-*oq*- in the meaning 'become; begin', AGR-*ič*- in the meaning 'continue', *łiy*- 'stop', and *xec*- 'stop, leave behind'; the verb 'be', and the verb AGR-*et*- 'want'. For example, in (65), the absolutive object of the infinitival clause is in gender II, but the verb AGR-*oq*- agrees with the entire clause in gender IV:

(65) [Xex-z-ä ciyo y-ac'-a] r-oq-si.
child-OS-ERG salt.ABS.II II-eat-INF IV-become-PST.WIT
'It came to be for the child to eat salt.'/ 'The child began to eat salt.'

In
(66), AGR-*ič*- also agrees with the entire clausal complement:

(66) [Neła k'et'-ä aw-bi r-iqir-a] r-iči-xosi
DEM.nI cat-ERG mouse-PL.ABS.nI nI-catch-INF IV-stay-PRS.PTSP
yoł.
be.PRS
'The cat keeps catching mice.' (lit.: "It continues for the cat to catch mice.")

As with the clausal complement of 'must', the biclausal structure is supported not only by agreement facts (which are not always present, as *łiy*- and *xec*- do not mark agreement) but also by word order permutations. The constituents of the infinitival clause can freely move around inside that clause as long as they precede the infinitive. Consider word order permutations in example (65):

(67) a. [Xex-z-ä ciyo y-ac'-a] r-oq-si.
child-OS-ERG salt.ABS.II II-eat-INF IV-become-PST.WIT
b. [Ciyo xex-z-ä y-ac'-a] r-oq-si.
salt.ABS.II child-OS-ERG II-eat-INF IV-become-PST.WIT
'It came to be for the child to eat salt.'/ 'The child began to eat salt.'
c. *[Ciyo y-ac'-a xex-z-ä] r-oq-si.
salt.ABS.II II-eat-INF child-OS-ERG IV-become-PST.WIT
d. *[Xex-z-ä y-ac'-a ciyo] r-oq-si.
child-OS-ERG II-eat-INF salt.ABS.II IV-become-PST.WIT

The entire infinitival clause can also move as a unit; compare (67) and (68). However, as (69) shows, constituents of an infinitival complement cannot be displaced outside of that complement:

(68) R-oq-si [xex-z-ä ciyo y-ac'-a].
IV-become-PST.WIT child-OS-ERG salt.ABS.II II-eat-INF
'It came to be for the child to eat salt.'/ 'The child began to eat salt.'

(69) a. *[Xex-z-ä y-ac'-a] r-oq-si ciyo.
child-OS-ERG II-eat-INF IV-become-PST.WIT salt.ABS.II
b. *Xex-z-ä r-oq-si [ciyo y-ac'-a].
child-OS-ERG IV-become-PST.WIT salt.ABS.II II-eat-INF
('It came to be for the child to eat salt.'/ 'The child began to eat salt.')

Also on par with epistemic 'must', impersonal sentences with aspectual verbs can include the mention of a referent that is affected, positively or negatively, by a given eventuality. The expression of this referent must occur in the main clause, not the infinitival complement. If a human participant stands to benefit from an event, he or she is usually expressed in the poss-essive; if a non-human participant is perceived as affected, it is usually expressed in the lative, as illustrated in (42) above (the lative can also be used with human participants, as in (43)).[8]

The impersonal use of the aspectual verb AGR-*oq-/AGR*-oq-NEG is often associated with the interpretation 'was (not) meant to be', as in the following examples. The infinitival clause in (70) is intransitive, with an absolutive subject 'weather', and the poss-essive form *eluq* is interpreted together with the matrix verb:

(70) a. Elu-q [hawa=baq tatanu yoł-a]
1PL-POSS.ESS weather.ABS.nIPL warm be.PRS-INF
r-oq-inč'u.
nIPL-become-PST.WIT.NEG
'It is not meant for us to enjoy warm weather.' (lit.: for the weather to get warm)
b. *[Hawa=baq elu-q tatanu yoł-a]
weather.ABS.nIPL 1PL-POSS.ESS warm be.PRS-INF
r-oq-inč'u.
nIPL-become-PST.WIT.NEG

In (71a), the embedded verb *t'et'ra* 'study' requires that its subject appear in the ergative, so the poss-essive phrase must be in the matrix clause. The poss-essive can freely move within the matrix clause, but as (71b) shows, it cannot appear inside the infinitival clause:

(71) a. Nesi-q [institut-y-ä t'et'r-a]
DEM.I-POSS.ESS institute-OS-IN.ESS study-INF
r-oq-n-ānu.
IV-begin-PST.nWIT-NEG
'It was not meant to be for him to go to college.' (lit.: to study at the institute)
b. *[Institut-y-ä nesi-q t'et'r-a]
institute-OS-IN.ESS DEM.I-POSS.ESS study-INF

[8] The lative is also used with 'hen' in example
(39) above; the sentence comes from a fairy tale where the hen may be personified, but this is apparently not reflected in the marking.

r-oq-n-ānu.
IV-become-PST.nWIT-NEG

This use of AGR-*oq*-/AGR-*oq*-NEG finds parallels in the use of the verb 'be' with infinitival complements, which also bear the typical interpretation 'it was (not) meant to be'. For instance:

(72) a. [Mi-n y-ex-a] zow-s.
2SG.ABS(.II)-and II-die-INF be.PST-PST.WIT
'And you would have been meant to die.' (Łux di yik'a yāy?:34)
b. Zow-s [mi-n y-ex-a].
be.PST-PST.WIT 2SG.ABS(.II)-and II-die-INF
'And you would have been meant to die.'

(73) [Neła k'et'-ä aw b-iqir-a] zow-nč'u.
DEM.nI cat-ERG mouse-ABS.III III-catch-INF be.PST-PST.WIT.NEG
'It was not meant to be for that cat to catch a mouse.'

Unlike the corresponding clauses with AGR-*oq*- in (71a) and (70), impersonal constructions with 'be' are judged infelicitous or downright unacceptable with a poss-essive or lative constituent in the main clause:

(74) ??/*Elu-q [elā-r b-ik'-a] zow-nč'u.
1PL-POSS.ESS there-LAT IPL-go-INF be.PST-PST.WIT.NEG
('It was not in the cards for us to get there.')

Finally, the verb AGR-*et*- 'want' can also take an infinitival complement. For example:

(75) [Šahar-y-ä ƛex-ani-x] r-eti-x murad-e-r.
city-OS-IN.ESS remain-MSD-AD.ESS IV-want-PRS Murad-OS-LAT
'Murad wants to stay in the city.'

(76) [Už-ä šopir-łi r-od-a] r-eti-x-ānu babiw-r.
boy-ERG driver-ABSTR.ABS.IV IV-do-INF IV-want-PRS-NEG father-LAT
'The father does not want the boy to work as a driver.'

In (75), AGR-*et*- 'want' agrees with the entire clausal complement (the agreement in (76) is ambiguous, because the absolutive *šopirłi* in the embedded clause is also gender IV). In further contrast with restructuring clauses, where all the arguments of the complex predicate have to be shared, the embedding verb and the infinitive in clausal-complement-taking constructions can each have their own arguments. This is clear in (76), where the infinitive *roda* takes the ergative and absolutive arguments, and the matrix verb *retix* takes the experiencer in the lative and the clausal complement in the absolutive position.

3.3 Raising constructions: Aspectual verbs with infinitival complements

In addition to forming impersonal biclausal constructions, aspectual verbs can participate in a subject-to-subject raising construction, where the understood subject of the embedded clause is structurally represented as the subject of the matrix verb. Compare the impersonal construction

in (77), where the matrix verb agrees with the infinitival clause (or corresponding expletive) in gender IV, and its raising counterpart in (78):

(77) [Neła aɣ-ä ko y-ac'-a]
[DEM.nI bird-ERG raspberry.ABS.II II-eat.TR-INF].IV
r-iči-xosi yoł.
IV-stay-PRS.PTSP AUX.PRS
'This bird keeps eating (the) raspberries.' IMPERSONAL

(78) Ža aɣi [ko y-ac'-a] b-iči-xosi yoł.
DEM bird.ABS.III raspberry.ABS.II II-eat.TR-INF III-stay-PRS.PTSP be.PRS
'This bird keeps eating (the) raspberries.' SUBJECT-TO-SUBJECT RAISING

No constituent other than the subject can undergo raising to the matrix clause. (79) shows the ungrammatical raising of the absolutive object:

(79) *Ko y-oq-si [neła aɣ-ä y-ac'-a].
raspberry.ABS.II II-become-PST.WIT DEM.nI bird-ERG II-eat.TR-INF
('This bird began to eat raspberries.')

The impersonal and raising constructions differ in several respects. First, since the aspectual verbs are all intransitive, the case of the raised subject is always absolutive, regardless of the case exhibited by the same constituent in the embedded clause (of course, if the embedded clause is intransitive, the difference is not apparent). Second, the matrix verb agrees with the raised absolutive subject, not with the clausal complement; again, if the raised absolutive is gender IV or if the verb does not mark agreement, the difference in agreement patterns is not apparent. The raised subject can occupy different positions in the matrix clause, something that is impossible for constituents of the infinitival clause. Compare (67) above and the examples below:

(80) a. Xexbi b-oq-si [ciyo y-ac'-a].
child.ABS.III III-become-PST.WIT salt.ABS.II II-eat-INF
b. B-oq-si [ciyo y-ac'-a] xexbi.
III-become-PST.WIT salt.ABS.II II-eat-INF child.ABS.III
c. B-oq-si xexbi [ciyo y-ac'-a].
III-become-PST.WIT child.ABS.III salt.ABS.II II-eat-INF
'The child began to eat salt.'

In contrast to control predicates, which we will discuss in section 4, raising verbs do not impose any selectional restrictions on their subjects. That means that inanimate subjects or subconstituents of idioms (idiom chunks) can freely appear as raised subjects. In (81), the raised subject is inanimate, and in (82a) it is part of the idiomatic expression *ziru ƛuƛix* (see also (59) above), which does not lose its idiomaticity under raising (compare the impersonal construction in (82b)):

(81) [Gut kur-a] b-oq-si peˁč.
smoke.ABS.II throw-INF III-begin-PST.WIT furnace.ABS.III
'The furnace began to smoke (to send out smoke).'

(82) a. Ziru [ƛuƛ-a] b-oq-xo.
fox.ABS.III give.birth-INF III-begin-PRS
b. [Ziru ƛuƛ-a] r-oq-xo.
[fox.ABS.III give.birth-INF].ABS.IV IV-begin-PRS
'A sun shower began.'

If the highest argument of the embedded clause in a raising construction is lative (e.g., for verbs of cognitive or psychological states) or poss-essive (e.g., in the accidental construction, CH. YY[ARG STR]), the case form of the argument is not preserved under raising, but changes to the absolutive. Compare the following examples:

(83) a. ƛirba-r biša r-eti-x.
guest-LAT food.ABS.IV IV-want-PRS
'The guest wants food.' (lit.: the food is wanted to the guest)
b. ƛirba [biša r-et-a] Ø-oq-si.
guest.ABS.I food.ABS.IV IV-want-INF I-become-PST.WIT
'The guest began to be hungry (lit.: to want food).'
c. *ƛirba-r [biša r-et-a] r-oq-si.
guest-LAT food.ABS.IV IV-want-INF IV-become-PST.WIT
(84) a. Besuroqu-za-q tor ɣanq'izi r-oq-si.
fisherman-OS.PL-POSS.ESS net.ABS.IV drown IV-become-PST.WIT
'The net sank on the fishermen.'
b. Besuroqu-bi [tor ɣanq'izi r-oq-a]
fisherman-PL.ABS.IPL net.ABS.IV drown IV-become-INF
b-oq-si.
IPL-become-PST.WIT
'The net began to sink on the fishermen.'
c. *Besuroqu-za-q [tor ɣanq'izi r-oq-a]
fisherman-OS.PL-POSS.ESS net.ABS.IV drown IV-become-INF
b-oq-si/r-oq-si.
IPL-become-PST.WIT/IV-become-PST.WIT
'The net began to drown on the fishermen.'

Interpretive differences between impersonal constructions and raising constructions are quite subtle, and the two structures are often offered interchangeably by our consultants. The subtle differences have to do with the perception of prominence, something that is hard to assess out of context. Roughly, if the entire event is perceived as prominent, the impersonal construction is warranted, whereas if the prominence is placed on the referent of the subject, the raising construction is more appropriate (see Langacker 1995, Grimm 2010 for a discussion of such perceptual prominence relations). Thus, when answering a question like the one posed in (85A), a Tsez speaker is more likely to use a raising construction:

(85) A: ła-ł xizāy debi rok'u r-oƛ-xo?
who-SUB.ESS behind 2SG.GEN1 heart.ABS.IV IV-hurt-PRS
'Who are you worried about?'
B: [ʕaraq'i ħaƛ-a] Ø-iči-x ʕali.

booze.ABS.III drink-PRS I-continue-PRS Ali.ABS.I
'Ali continues to drink.'

On the other hand, if a general description of events is being offered, for instance in response to the question in (86A), the impersonal construction is quite appropriate:

(86) A: Šebi ħal?
what.ABS health.ABS.III
'How are things?'
B: [ʕal-ā ʕaraq'i ħaƛ-a] r-ičі-x.
Ali-ERG booze.ABS.III drink-INF IV-continue-PRS
'Ali continues to drink.'

All types of infinitival complements discussed in this section are transparent with respect to negation, binding, scope, relativization, and wh-question formation. The negation on the main clausal predicate can determine the presence of a negative polarity item inside the infinitival clause; for example, the negation on 'want' in (87) licenses the negative polarity item *nārkin* 'anywhere' inside the infinitival clause:

(87) [Užі nā-r-kin Ø-ik'a-a] eniw-r r-eti-x-ānu.
boy.ABS.I where-LAT-FOC I-go-INF mother-LAT IV-want-PRS-NEG
'Mother does not want the boy to go anywhere.'

Reflexive binding into the infinitival complement is possible and occurs in the same manner as clause-internal binding (Ch. YY[bind]). Constituents of an infinitival clause can be relativized and questioned the same way that constituents of the matrix clause can (see CH. YY[RCs]; CH. YY[wh]). As we show in section 4, masdar complement clauses are equally transparent, whereas nominalized clauses with *-łi* and finite clausal complements with *-ƛin* are not.

4 Biclausal structures with infinitival and masdar complements: Control constructions

4.1 General remarks

In control clauses, such as (88), the subject *you* is semantically linked both to the matrix verb *try* and to the embedded verb *make happy*. Such double semantic linking separates control from raising, where the subject is semantically linked only to the embedded verb.

(88) If you try to make everyone happy, everyone will be happy but you.

With the exception of the evaluative intransitive predicates 'be easy', 'be difficult', 'be useful', illustrated in (42) and (43), the verbs we have discussed up to this point take clausal complements only with the infinitival predicate, not the masdar predicate. Masdar clauses are understood as describing goal-oriented events, hence their subject has to be volitional and/or sentient (capable of goal-setting). This connotation makes masdars inappropriate with raising predicates (whose subject does not have to be volitional or sentient) but fitting for control

predicates. With control predicates, infinitival and masdar clauses seem interchangeable. For example:

(89) Babi-y-ä [sult'an šahar-y-ā-ɣor Ø-egira-ani-x/Ø-egira-a]
father-OS-ERG Sultan.ABS.I city-OS-IN-VERS I-send-MASD-AD.ESS/I-send-INF
ħukmu b-oy-s.
decision.ABS.III III-do-PST.WIT
'Father decided to send Sultan to the city.'

The distinction between the two types of complements is subtle. Typically, the choice of a masdar clause entails that the event expressed in the clause is perceived as a specific (as opposed to a more general) goal. In some instances, the choice between a masdar and an infinitive may be informed by the degree to which a certain event is considered typical or mundane. For example, asking someone to close the door or to mail a letter is expressed by an infinitival clause, but asking someone to write down a commentary or help another person with a difficult task is more appropriately encoded by a masdar clause. The infinitival clause is joined to the higher verb without any case marking. Masdar clauses, meanwhile, appear in two forms, lative and ad-essive; we have not been able to determine interpretive differences between these forms. Imnajšvili (1963: 237) lists them both and indicates that the ad-essive form is more common to the Asakh dialect.

Control verbs are known to impose selectional restrictions on their arguments (subject or object, depending on the type of control), and such selectional restrictions are observed in Tsez. Inanimate noun phrases cannot participate in control constructions. For that reason, the following example is ungrammatical, although the underlying ergative construction is fully acceptable (see CH.YY [ARG STR]):

(90) *łał-ä [as r-iqir-a] baybik b-oy-x.
wind-ERG sky.ABS.IV IV-catch-INF beginning.ABS.III III-do-PRS
('The wind is beginning to fog up the sky.')

The control relationship can be established only between the subject of an embedded infinitive or masdar and the subject or object of the higher clause. As the following example shows, control between the subject of the matrix clause and the object of the embedded clause is impossible:

(91) *Sult'an-ä [babi-y-ä šahar-y-ā-ɣor Ø-egira-ani-x/Ø-egira-a]
Sultan-ERG father-OS-ERG city-OS-IN-VERS I-send-MASD-AD.ESS/I-send-INF
ħukmu b-oy-s.
decision.ABS.III III-do-PST.WIT
('Sultan decided for father to send him to the city.')

A subconstituent of the subject or object of a control verb also cannot determine the control relation. For example, (92) can only be interpreted as meaning that the director made the decision to send Sultan to the city, not that the father made that decision.

(92) Babiw-z direktor-ä [Sult'an šahar-y-ā-ɣor

father-GEN2 director-ERG Sultan.ABS.I city-OS-IN-VERS
Ø-egira-ani-x/Ø-egira-a] ħukmu b-oy-s
I-send-MASD-AD.ESS/I-send-INF decision.ABS.III III-do-PST.WIT
'Father's director decided to send Sultan to the city.'
NOT: "Father decided to send Sultan to the city."

Verbs that impose strict requirements on the arguments in the control relation are known as obligatory control verbs (Davies and Dubinsky 2004: Ch. 1), and we will concentrate on such verbs in the discussion below. For brevity, we will be referring to these as "control verbs," presupposing their obligatory control characterization.

As with impersonal and raising verbs, the position of an infinitival/masdar clause with respect to the verb is quite free. As long as the internal integrity of the complement is preserved, it can appear to the left or the right of the predicate. The placement is determined by information-structural considerations as well as the size of the complement; longer complements tend to be placed at the left sentential periphery (see CH.YY[Word order] for more discussion).

Control complements, like noun phrases, can be conjoined with the enclitic *–n(o)* on each conjunct. For example:

(93) ʕal-ä kul er-xo [masukuw-ā-ɣor
Ali-ERG hope.ABS.III put-PRS Moscow-IN-VERS
Ø-ik'-ani-x]-no [mašina b-is-ani-x]-no.
I-go-MASD-AD.ESS-and car.ABS.III III-take-MASD-AD.ESS-and
'Ali hopes to go to Moscow and to buy a car.'

The predicate of infinitival and masdar control complements can optionally carry the quotative marker *–ƛin*. For example:

(94) ʕal-ä kul er-xo [masukuw-ā-ɣor Ø-ik'-ani-x-ƛin].
Ali-ERG hope put-PRS Moscow-IN-VERS I-go-MASD-AD.ESS-QUOT
'Ali hopes to go to Moscow.'
(95) ʕal-ä [šebin r-od-a-ƛin] šuƛ'ir-no.
Ali-ERG thing.ABS.IV IV-do-INF-QUOT forget-PST. nWIT
'Ali forgot what needs to be done (what to do).'

This kind of marking, also attested in Hinuq (Forker 2013: 617-618), is quite rare. It is more common with infinitival and masdar adjunct clauses (see Ch. [ADV CL]), and is very unusual with control clauses. When present, this marking does not change the transparency of an infinitival or masdar complement (see CH.YY [Binding] for the transparency of these complements to binding). In the following examples, the matrix subject binds reflexives inside the control complement regardless of the presence of the quotative, and the constituents of the main and masdar clauses scopally interact with each other. For instance, (97) could mean that a particular boy took it upon himself to bring all the balloons, or that for every available balloon there was a boy that was going to bring it. Such ambiguity would not be possible if the masdar clause were not transparent.

(96) ʕal-ä kul er-xo [nesä nesi-s ħalt'i b-od-ani-x(-ƛin)].
Ali-ERG hope put-PRS REFL.I-GEN1 work.ABS.III III-go-MASD-AD.ESS-QUOT
'Ali hopes to do his (own) work.'

(97) Už-ä [šibaw šar b-ow-ani-x(-ƛin)]
boy-ERG every balloon.ABS.III III-bring-MASD-AD.ESS-QUOT
ƛ'iri r-is-si.
above IV-take-PST.WIT
'A boy promised to bring every balloon.' (*a* > *every; every* > *a*)

The lack of a syntactic contribution from *-ƛin* in these instances is in contrast with the syntactic role of quotative complements in finite clauses (see section 6 below), which are never transparent. It seems that the presence of the quotative on masdar and infinitival clauses serves a subtle pragmatic function, underscoring the hypothetical, future-oriented nature of the event under consideration.

4.2 Subject control constructions

4.2.1 Forward control

Tsez has a sizeable number of subject control verbs, all of which take infinitival or masdar complements. Only a few of the verbs in this group are simple verbs;[9] the majority are complex. A number of these complex subject control verbs include as their predicative component an abstract lexical item borrowed from Arabic.

(98) Subject control verbs: Simple verbs
a. AGR-is- 'try' (lit. 'take')
b. ƛ'iri AGR-is 'take upon oneself' (lit.: up take)
c. šuƛ'ir- 'forget'
d. koƛ'- 'know how; be equipped; be trained; be set'
e. AGR-et- 'want; need'
f. AGR-utik'- 'have time to; manage'

Of these verbs, 'try', 'take upon oneself', and 'forget' (98a-c) are transitive and take a complement clause as the absolutive object. 'Try' and 'take upon oneself' show invariant agreement in gender IV with the complement clause in absolutive position. The verb *šuƛ'ir-* is the transitive (causative) form of the verb *šuƛ'-* 'forget', which takes a lative and absolutive. The former combines with the ergative experiencer and absolutive subject. Not surprisingly, it is often used in the prohibitive form, illustrated in (101).

(99) [Kid-ba-bi r-iqir-a] r-is-no nes-ä.
[girl-OS.PL-PL.ABS.nIPL nIPL-catch-INF].IV IV-take-PST.nWIT DEM.I-ERG
'He tried to catch up with the girls.' (after Č'ikayn, murin, hiƛun:20)

(100) ħakim-ä [ɣalat' bit'izi b-od-ani-x]

[9] We include the verb *ƛ'iri* AGR-*is*- 'take upon oneself' in the simple-verb group, to distinguish it from the complex verbs which otherwise include an object and a light verb.

boss-ERG [mistake.ABS.III correct III-do-MASD-AD.ESS].IV
λ'iri r-is-si.
upon IV-take-PST.WIT
'The boss took it upon himself to correct the mistake.'

(101) [Ac ħiš-a] šuλ'är-no!
door.ABS.II close-INF forget-PROH
'Don't forget to close the door!'

The verb 'know; be prepared' (98d) combines with the clausal complement in the absolutive position (where it alternates with a regular noun phrase) and the controller in the lative.

(102) Debe-r [ža ħiλ'oqu r-eynoy-r-a-kin]
2SG-LAT DEM handkerchief.ABS.IV IV-work-CAUS-INF-FOC
koλ'i-xosi yoł-ä?
know-PRS.PTCP be.PRS-INTERR
'Are you prepared to at least put this handkerchief to work?' (Barkat yołäsi ħiλ'oqu:31)

This verb is very commonly used in a set expression 'not know what to do/where to go', where it alternates between taking a clausal complement, as in (103a), and taking a nominal complement modified by an infinitival or masdar relative clause, as in (103b), where *roda šebin* is a noun phrase:

(103) a. [šebin r-od-a] koλ'i-nč'ey
thing.ABS.IV IV-do-INF know-NEG
'not know what to do' ("not know what things to do")
b. [[r-od-a] šebin] koλ'i-nč'ey
IV-do-INF thing.ABS.IV know-NEG
'not knowing what to do' ("not know things that have to be done")

The other control verb with a lative experiencer is AGR-*et*-; this verb is generally polysemous but, in the control structure, is used only in the meaning 'want; need'. For example:

(104) Elu-r [b-iš-ani-x] r-eti-n.
1PL-LAT [IPL-eat.INTR-MASD-AD.ESS].IV IV-want-PST.nWIT
'We want/need to eat.' (Barkat yołäsi ħiλ'oqu:31)

In section 2, we observed the use of AGR-*et*- as a restructuring predicate with the meaning 'want'. In both uses, the denotation of the lative is limited to animate participants. The restructuring verb does not combine with masdars, only with infinitives, so the use of the masdar in (104) is a clear sign of a biclausal control structure (however, as we shall see from the examples below, infinitival control complements are also possible). In the restructuring use of this verb, all the clausal constituents move around freely, as shown in (28); in the control use, the constituents of the masdar or infinitival clause can only move in the left periphery of the embedded verb. The meaning difference between the restructuring and the control uses of AGR-*et*- seems subtle, and we can only offer some observations here. The control use is associated with the interpretation that the desire is somehow imposed on a person by external

circumstances, rather than coming from within. Probably related to this observation is the fact that, when used as a control verb, AGR-*et*- typically appears in the non-witnessed form in the past, thus accentuating the fact that the desire or need is perceived as greater than the participant's internal state. Based on this distinction, 'need' seems to be the most accurate translation of the control use, while 'want' is more appropriate for the restructuring use.

(105) Xexłiƛ' b^{ʕ}ałay maħor r-oƛik', *pro*
quickly dagger.ABS.IV outside IV-deliver.IMPER 1SG.LAT
gulu b-exad-a r-eti-n.
[horse.ABS.III III-slaughter-INF].ABS.IV IV-want-PST.nWIT
'Quickly bring me the dagger, I need to slaughter the horse.' (Babiwn, užin, Okun:54)

(106) Dä-r [žek'u-de kec-a] r-eti-n.
1SG-LAT [man-APUD.ESS sleep-INF].IV IV-want-PST.nWIT
'I needed to sleep with a man.' (Xanno: 66)

The intransitive verb AGR-*utik'* have time to; manage' occurs mostly with infinitival/masdar clauses; its use with postpositional phrases is possible but rare. Compare:

(107) Howži biš^{w}a r-ac'-a-kin Ø-utik'-x-ānu.
now food.ABS.IV IV-eat.TR-INF-FOC I-have.time-PRS-NEG
'I (man speaking) don't even have the time to eat.' (Eniws esiw:75)

(108) Yedu ħalt'i-de-r Ø-utik'-x-ānu.
dem work-apud-lat I-have.time.to-PRS-NEG
'I don't have time for this work.'

The following complex verbs all take infinitival or masdar complements and function as subject control predicates. Their argument structure and respective case marking is the same as that of the light verbs on which they are based; thus, verbs formed with AGR-*oq*- take the absolutive controller, while all the other verbs in (109) express the controller in the ergative.

(109) Subject control verbs: Complex verbs

a.	q'ač'azi AGR-oq	'get ready'
b.	ħadur/ħatur AGR-oq	'be ready'
c.	razi AGR-oq	'agree'
d.	q'abul AGR-oq	'agree; concede'
e.	muk'ur AGR-oq	'agree'
f.	mut'iʕ AGR-oq	'agree'
g.	ruhun AGR-oq	'learn'
h.	xalbik(i) bod-	'try' (lit.: attempt make)
i.	baybik(i) bod-	'begin' (lit.: beginning make)
j.	ħukmu bod-	'decide' (lit.: decision make)
k.	inkar bod-	'refuse' (lit.: rejection make)
l.	kul er-	'hope' (lit.: hope put)

m. purma teƛ-[10] ‘accede’ (lit.: consent give)
n. roži teƛ- ‘promise’ (lit.: word give)

Here are some examples of control constructions; they are quite common in spontaneous speech and narratives.

(110) Di [besuro-bi r-iqir-ani-x] ruhun Ø-oq-a Ø-āy.
1SG.ABS.(I) fish-PL.ABS.nIPL nIPL-get-MSD-AD.ESS learn I-become-INF I-must
‘I must learn to catch fish.’ (Besurozaqu: 3)

(111) Boc’-ä [keč’ qʿaƛ-a] baybik b-odi-n.
wolf-ERG song.ABS.III sing-INF beginning.ABS.III III-do-PST.nWIT
‘The wolf began to sing a song.’ (Didur ʕomoyä boc’a k’irik’no:20)

(112) Xan-e-z kid-b-ä [ža-x y-ik’-ani-x] inkar
king-OS-GEN2 girl-OS-ERG DEM-AD.ESS II-go-MSD-AD.ESS refusal.ABS.III
b-odi-n.
III-do-PST.nWIT
‘The king’s daughter refused to marry him.’ (Xanes łʿono užin, sis kidno:9)

(113) Sidakin kid-b-ä [nesi-x y-ik’-ani-x] roži
any.OBL girl-OS-ERG DEM.I-AD.ESS II-go-MASD-AD.ESS word.ABS.IV
teƛ-xo zow-n-ānu.
give-IPFV.CVB AUX.PST-PST.nWIT-NEG
‘No girl would promise to marry him.’ (Hibos hunar:4)

(114) [Bilq’isdi xan-łun xec-ani-x] žamaʕat razi
Bilq’isdi.ABS.II king-as leave-MASD-AD.ESS society.ABS.IPL agree
b-oq-no.
IPL-become PST.nWIT
‘The locals agreed to make Bilq’isdi the leader (of the village).’ (Bilq’isdi:59)

Some verbs that tend cross-linguistically to behave as control verbs (cf. Davies and Dubinsky 2004: 11-12), such as ‘remember’, are missing from both lists in (98) and (109). This is not an accidental oversight; the meaning of ‘remember’ and certain other verbs is typically rendered by a higher verb with an embedded clause introduced by the quotative *–ƛin* (see section 6 below). Furthermore, several of the verbs listed as control verbs, especially the complex ones, can take both infinitival/masdar complements and quotative complements.

4.2.2 Backward control

In all the examples considered so far, the direction of the control relation is forward: the matrix argument provides the referential identity of the understood embedded subject of an infinitival or masdar clause. The opposite situation is in fact impossible; compare the well-formed example (112) and its ungrammatical counterpart below, where the subject is expressed in the embedded clause:

(115) *[Ža-x xan-e-s kid y-ik’-ani-x] inkar

[10] Complex verbs with ‘give’ have two forms, *teƛ-* and *neƛ-*, depending on the direction of the transfer (away from vs. toward the speaker/attitude holder).

DEM-AD.ESS king-OS-GEN1 girl.ABS.II II-go-MSD-AD.ESS refusal.ABS.III
b-odi-n.
III-do-PST.nWIT
('The king's daughter refused to marry him.')

The forward (or downward, depending on one's view of grammar) direction of the control relation, where the referential identity of the understood embedded subject determines the identity of the embedded subject, is cross-linguistically very common. A priori, however, there is no reason to rule out an inverse (backward, upward) control relation, where the matrix argument is silent and its referential identity depends on the overt embedded argument. This is a particularly reasonable assumption in the case of Tsez, where infinitival and masdar clauses in principle allow the expression of all the verbal arguments in the same cases as in a tensed clause (see CH.YY[NMLZ]). At least four control predicates, AGR-*oq*- 'begin', AGR-*iħ*^{w}- 'start, begin', AGR-*ik'*- 'begin (lit.: go)',[11] and AGR-*ič*- 'continue' exhibit this inverse pattern, which has become known as backward control (see Fukuda 2008 for an overview of the phenomenon from a cross-linguistic perspective and Polinsky and Potsdam 2002 for a detailed syntactic analysis of the Tsez pattern).[12] All these verbs are intransitive. In the examples below, these verbs, as matrix predicates, seem to agree with the embedded ergative argument (*yisä* in (116); *bełiqanä* in (117), *nełä* in (118); *yedä* in (119)), which is otherwise impossible in Tsez (see CH.YY[AGR]). Moreover, alternative agreement is impossible; the verbs in (116) through (119) cannot show gender IV agreement (the default agreement with the infinitive or expletive subject).

(116) Sosisi [yis-ä esi-nč'ey] Ø-iči-x/*r-iči-x.
at.first DEM.I-ERG say-NEG.INF I-stay-PRS/IV-stay-PRS
'At first he persisted in not telling the answer.' (lit.: he continued not to tell) (based on ʕAq'ilawni kid:9)

(117) [Bełiqan-ä kawu-bi ser-a] Ø-iħu-n/*r-iħu-n.
hunter-ERG gate-PL.ABS.nIPL unlock-INF I-begin-PST.nWIT/IV-begin-PST.nWIT
'The hunter began to unlock the gates.' (T'omceni žek'un, ʕoλno bełiqanno:36)

(118) [Neł-ä bix kos-a] y-oq-no/*r-oq-no.
DEM.nI-ERG grass.ABS.III mow-INF II-begin-PST.nWIT/IV-begin-PST.nWIT
'She began to mow the grass.' (C'irdux:48)

(119) [Yed-ä qˤirič' k'ed-ani-łe-r] Ø-oq-no/
DEM.I-ERG scissors.ABS.IV look.for-MASD-CONT-LAT I-begin-PST.nWIT
*r-oq-no.
IV-begin-PST.nWIT
'He began to look for scissors.' (Bilq'isdi:26)

The expression of the corresponding absolutive argument in the matrix clause is impossible:

(120) *Sosisi [esi-nč'ey] ža Ø-iči-x.
at.first say-NEG.INF DEM.ABS(.I) I-stay-PRS
('At first he persisted in not telling the answer.')

[11] AGR-*ik'*- is used as a control verb only in the meaning 'begin', not in the meaning 'go'.
[12] To the best of our knowledge, the pattern was first noted in Kibrik (1981: 38-39).

(121) *[Kawu-bi ser-a] bełiqan Ø-iħu-n.
gate-PL.ABS.nIPL unlock-INF hunter.ABS.I I-begin-PST.nWIT
('The hunter began to unlock the gates.')

Likewise, it is impossible to express both arguments simultaneously in the infinitival/masdar clause and the matrix clause:

(122) *[Neł-ä bix kos-a] ža y-oq-no.
DEM.nI-ERG grass.ABS.III mow-INF DEM.ABS(.II) II-begin-PST.nWIT
('She began to mow the grass.')

The verbs that appear in the backward control construction have other uses. The verbs AGR-*oq*- and AGR-*ič*- were discussed in section 3, where we showed that they can appear as raising verbs. Outside its control use, the verb AGR-*iħ*^{w}- is interpreted as 'go outside'. However, in non-control uses, the backward-control-permitting verbs do not impose selectional restrictions on their complements; furthermore, they can appear only in the matrix clause. In the control use discussed here, noun phrases expressing non-volitional subjects or idiom chunks are impossible. For example:[13]

(123) *[Ziru λuλ-a] b-iħu-x.
fox.ABS.III give.birth-INF III-begin-PRS
('A sun shower (clear-sky hail) begins.')
(124) *[T'ont'oħ-ä buq' b-ac'-a] b-iči-x.
darkness-ERG sun.ABS.III III-eat.TR-INF III-stay-PRS
('The solar eclipse continues.')

Thus, whether the control structures presented here instantiate a special use of these verbs or represent several homophonous verbs, they need to be accounted for.

There is sufficient evidence that the ergative noun phrase in these sentences occurs within the embedded clause. That noun phrase can switch its position only with other elements in the embedded clause. Compare (117) and the well-formed example in (125), where noun phrases in the embedded clause change position, with the unacceptable (126a,b), where the same constituents are displaced into the matrix clause.

(125) [Kawu-bi bełiqan-ä ser-a] Ø-iħu-n.
gate-PL.ABS.nIPL hunter-ERG unlock-INF I-begin-PST.nWIT
'The hunter began to unlock the gates.'
(126) a. *[Kawu-bi ser-a] Ø-iħu-n bełiqan-ä.
gate-PL.ABS.nIPL unlock-INF I-begin-PST.nWIT hunter-ERG
b. *[Bełiqan-ä ser-a] Ø-iħu-n kawu-bi.
hunter-ERG unlock-INF I-begin-PST.nWIT gate-PL.ABS.nIPL

[13] This sentence can be interpreted with the non-idiomatic meaning, "The fox got out to give birth", but that is not relevant for our discussion.

These facts strongly suggest that the construction is indeed biclausal and that the ergative argument is in the embedded infinitival/masdar clause. Equally crucial is the observation that there is a silent matrix subject in (116)-(119), which obligatorily corefers with the embedded subject. Evidence for the presence of that subject comes from reflexivization and long-distance agreement, as we will discuss immediately below.

Tsez reflexives are local and must have a c-commanding antecedent (CH.YY[BINDING]). For example, in (127), only the embedded subject can act as an antecedent for the compound reflexive; the "work" referred to can be Ibrahim's work, but not the boss's work.

(127) ħakim-qo [irbahin-ä nesä nesi-s ħalt'i b-od-a] r-āy.
boss-POSS.ESS Ibrahim-ERG REFL.I-GEN1 work.ABS.III III-do-INF IV-must
'For the boss$_i$'s sake, Ibrahim$_j$ must do his$_{j/*i}$ work.'

However, in (128) below, *nesä nesir* is licensed and interpreted as co-referential with the ergative noun phrase, despite the fact that the reflexive appears to be structurally higher than the ergative expression.

(128) Nesä nesi-qo-r [Irbahin-ä yedu ħalt'i b-od-a] Ø-iħu-x.
REFL.I-POSS-LAT Ibrahim-ERG DEM work.ABS.III III-do-INF I-begin-PRS
'Ibrahim$_i$ begins to do this work for himself$_i$.'

These facts can be accounted for by the presence of a silent matrix subject that c-commands the reflexive and co-refers with the ergative NP. This possibility is represented schematically in (129) for the sentence in (128):

|---------COINDEXATION----------|
(129) __$_i$ nesä$_i$ nesi-qo-r Ø-iħu-x [irbahin$_i$-ä yedu ħalt'i
REFL.I-POSS-LAT I-begin-PRS Ibrahim-ERG DEM work.ABS.III
|_____|
REFLEXIVE BINDING
b-od-a].
III-do-INF
'Ibrahim$_i$ begins to do this work for himself$_i$.'

The pattern of long-distance agreement also points to the presence of a silent matrix subject (see CH. YY[AGR]). Under long-distance agreement, a matrix verb exceptionally agrees with an absolutive argument in an embedded clause, which is interpreted as a topic. For example:

(130) Dä-r [debi kid y-äy-ru-łi] y-iy-x.
1SG-LAT 2SG.GEN1 girl.ABS.II II-come-PST.PTCP-NMLZ II-know-PRS
'I know that your daughter has arrived.'

Long-distance agreement can only cross one clause boundary at a time. Given this single-clause-boundary restriction as well as the restriction that agreement must be with the absolutive, there is no way to explain the long-distance agreement between the embedded absolutive argument and the matrix verb unless there is a silent absolutive subject in the clause immediately dominated by

the verb ‘know’. This silent subject can properly induce long-distance agreement on the higher verb:

(131) Dä-r [[debe-z kid$_i$-b-ä micxir b-is-a]
1SG-LAT 2SG-GEN2 girl-OS-ERG money.ABS.III III-take-INF
__$_i$ y-äq-ru-łi] y-iy-x.
II-begin-PST.PTCP-NMLZ II-know-PRS
‘I know that your daughter began to receive money.’

We are thus left with the conclusion that several Tsez verbs instantiate the cross-linguistically less common, yet not impossible pattern of obligatory backward control. The control verb takes an obligatorily silent subject and the embedded infinitival or masdar clause includes the coreferential subject in the ergative or absolutive case. Since the control relation is based on the presence of a sentient and volitional referent, experiencers and inadvertent agents cannot be expected in such constructions; thus, subjects of embedded infinitival or masdar clauses under backward control are either ergative (if the embedded predicate is transitive) or absolutive (if the embedded predicate is intransitive). It is possible that the pattern of backward control in Tsez is found with these particular control verbs because they are highly polysemous. Under such circumstances, the use of a particular pattern may allow the language learner and speaker to distinguish between the raising/impersonal constructions discussed in section 3, and the control structures discussed here.

4.3 Object control

Object control verbs are less numerous than subject control verbs in Tsez, for two unrelated reasons. First, many situations involving object control can be expressed by a verb denoting the base event in the causative form (see Nedjalkov and Silnitsky 1973, who discuss the polysemy of causative affixes and identify control-predicate-like meaning as one of the currently attested meanings). Recall that Tsez causatives can carry the meaning of either direct or indirect causation, and this polysemy allows speakers to use causitives to express meanings associated with verbs like ‘ask’, ‘order’, and ‘tell’, which are typically control predicates. For instance, the meanings of ordering, requesting, etc., are conveyed by causatives in the following examples.

(132) Yił-ä nesi-q žedu-ƛ’o-si qaca
DEM.nI-ERG DEM.I-POSS.ESS DEM.IPL-SUPER.ESS-ATTR firewood.ABS.IV
r-et’ur-er-no.
IV-pluck-CAUS-PST.nWIT
‘She told/ordered him to chop firewood instead of them.’ (Hibos hunar:48)

(133) Kid-be-q ɣˁay bobori-k’-er-xo eni-y-ä.
girl-OS-POSS-ESS milk.ABS.II warm-TR-CAUS-PRS mother-OS-ERG
‘Mother is asking/telling/ordering the girl to warm up the milk.’

The second reason for the paucity of object control verbs in Tsez has to do with the availability of quotative constructions in this language (section 6). As with subject control constructions, quotatives are often used in contexts where object control is typically found in other languages.

However, some object control verbs can be found. They include:

(134) Object control verbs: Simple verbs
a. AGR-egir- 'send'
b. esir- 'ask'
c. mˁoł- 'teach'
d. xec- 'allow'[14]

The verb AGR-*egir*- 'send' is particularly common as a control predicate. For example:[15]

(135) Ø-ˁeže-ni esi-y-ä Ø-ˁeɣe-ni esiw [zeru
I-big-DEF sibling-OS-ERG I-small-DEF sibling.ABS(.I) malt.ABS.III
łek'-ir-a] Ø-egir-no.
mix-CAUS-INF I-send-PST.nWIT
'The older brother sent the younger one to make malt.' (Ʀoƛno esiwn, sis esiyn:22)

Complex verbs that take infinitival or masdar control complements are listed below.

(136) Object control verbs: Complex verbs
a. q'ač'azi AGR-od- 'prepare; make ready'
b. izmu teƛ- 'allow' (lit.: permission give)
c. ixtiyar teƛ- 'permit' (lit.: indulgence give)
d. ruhun AGR-od- 'teach, train'
e. t'amizi AGR-od- 'force'

Some examples:

(137) Yił-ä harihun hemedur [sis r-od-a]
DEM.nI-ERG slowly so one IV-do-INF
pro t'amizi Ø-odi-n.
ABS.I force I-do-PST.nWIT
'And so she slowly forced him to do one thing (after another).' (Hibos hunar:12)

As example (138) shows, the nominal part of a complex control verb can be separated from the light verb:

(138) Uži-r teƛ-x-ä mi izmu
boy-LAT give-PRS-INTERR 2SG.ERG permission.ABS.III
[gulu-ƛ' zow-ani-r]?
horse-SUPER.ESS climb-MASD-LAT
'Do you give the boy permission to get on the horse?' (Qacis gulu:24)

Within object control, there is no evidence of the backward control pattern.[16]

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[14] Recall that *xec*- can be used as a restructuring verb (see section 2), in which case it combines with a converb. As a control verb, it combines with an infinitival or masdar complement.
[15] See also example (19) above.

As was the case with infinitival clauses that occur with raising and impersonal predicates (section 3), infinitival and masdar control complements are transparent to binding, relativization, wh-question formation, and negative-polarity-item licensing from the matrix clause. For instance, in (139), the negation on the matrix verb determines the presence of the negative polarity item *sidxokin* 'to anyone' in the masdar clause:

(139) Eniw razi y-oq-xo zow-n-ānu [ža
mother.ABS.II agreeing II-become-PRS AUX.PST-PST.nWIT-NEG DEM.ABS(.II)
sid-xo-kin y-egir-ani]-x.
one-AD.ESS-FOC II-send-MASD-AD.ESS
'Mother refused to give her to anyone in marriage.' (Allahes ašuni:11)

5 Biclausal structures with nominalized complements

In nominalized clausal complements marked with the suffix *–łi,* the predicate appears in either the past participial form in *–ru* or the present participial form in *–xosi*. If the predicate of the corresponding embedded clause includes the copula 'be', that copula appears in its participial form as well: *yäł-ru* for the present (non-past) form, and *zäw-ru* for the past form. Whereas the copula can easily be omitted in matrix clauses, as we have seen in many examples throughout this work, no such omission is possible in the nominalized clause. With the past participle, the complement clause has relative past time reference, and with the present participle, relative present or future time reference.

The nominalizer *–łi* can be readily omitted (see CH. YY[NMLZ]), in which case a nominalized clause is indistinguishable from a participial relative (CH.YY[RCs]). For instance, Imnajšvili (1963:236-237) presents the following examples without *–łi*, for which our consultants usually suggest reinstating the marker:

(140) Di y-ok'āk'-ru[-łi] r-iy-no žedu-r.
1SG.ABS(.II) II-steal-PST.PTCP-NMLZ IV-know-PST.nWIT DEM.IPL-LAT
'They found out (knew) that I was kidnapped.' (Imnajšvili 1963:236)

(141) Di Ø-ˢoλ'u-xosi[-łi]-n r-ij-ir-si; neti
1SG.ABS(.I) I-fall-PRS.PTCP-NMLZ-and IV-know-CAUS-PST.WIT when
di Ø-exu-xosi[-łi] debe-r r-āy-ā?
1SG.ABS(.I) I-die-PRS.PTCP-NMLZ 2SG-LAT IV-know.FUT-INTERR
'You knew that I fell; will you know when I die?' (Imnajšvili 1963:237)

The two clauses can of course be distinguished by their function; a nominalized clause appears as a complement to a verb, and a relative clause is adnominal. In the examples below, we always show the nominalizer *–łi* for expository purposes.

[16] Backward object control is attested in Malagasy (Potsdam 2009).

Nominalized clausal complements are impossible in impersonal constructions such as the ones discussed in section 3.2 above. Compare the well-formed example in (39), repeated below, and the ungrammatical (143):

(142) [C'i er-a] onoč-a-r isał-xo zow-n.
fire.ABS.IV put-INF hen-OS-LAT be.difficult-IPFV.CVB AUX.PST-PST.nWIT
'It was hard for the hen to light a fire.' (Onočun, mamalayn:4)

(143) *[Onoč-ä c'i er-xosi-łi] lazataw zow-n.
hen-ERG fire.ABS.IV put-PRS.PTCP-NMLZ pleasant be.PST-PST.nWIT
('That the hen was lighting a fire was pleasant.')

The verbs that take nominalized tensed complements with the nominalization marker *–łi* are mostly cognition and perception verbs, with a lative experiencer and the clausal complement in the absolutive position. For those verbs that mark agreement, the matrix verb agrees with the complement clause in the absolutive position. A number of verbs that take nominalized complement clauses also register long-distance agreement with the embedded absolutive (under proper information-structural conditions), as discussed in CH.YY [AGR].

(144) a. AGR-iy- /AGR-iy-r
'know'/ 'inform, remind'
b. AGR-ukad-/AGR-uka-r
'see'/ 'show'
c. AGR-ac-
'dislike, disprefer'
d. bič'zi AGR-oq-/ bič'zi AGR-od-
'be clear'/ 'explain, make clear'
e. rok'-ƛo-r AGR-ay- / rok'-ƛo-r AGR-ay-r
heart-SUPER-LAT come/ heart-SUPER-LAT come-CAUS
'remember, memorize'/ 'make remember'
f. rok'-e-r AGR-it-
heart-OS-LAT touch
'learn, internalize'
g. teq-
'hear'
h. čuq-
'recognize, understand'
i. šuƛ'-
'forget'

In addition, verbs of speech also take nominalized complements, although such complements are less common than finite complements, which will be discussed in section 6 below. For example:

(145) Žoy-ä [babiy-ä łina-ł xizay Ø-egä-ru-łi]
lad-ERG father-ERG what-CONT.ESS behind I-send-PST.PTCP-NMLZ
esi-n.
tell-PST.nWIT

'The youngster explained ('told') what the father had sent him for.' (Eniws esiw:68)

The predicate of the nominalized clause must appear as its final constituent; material in front of the predicate can move around freely inside the clause. For instance, in the following sentence, the embedded predicate is *łet'ix yäłrułi*; as long as it stays in the final position in the nominalized clause, all other orders are acceptable:

(146) a. [Neł-ä ža beƛ'q'ˤu b-ac'-ani-x łet'i-x
DEM.nI-ERG DEM sheep.ABS.IIII III-eat-MASD-AD.ESS pick-PRS
yäł-ru-łi] nesi-r čuqˤ-no.
be.PRS-PST.PTCP-NMLZ DEM.I-LAT recognize-PST.nWIT
b. [Ža beƛ'q'ˤu neł-ä b-ac'-ani-x łet'i-x
DEM sheep.ABS.IIII DEM.nI-ERG III-eat-MASD-AD.ESS pick-PRS
yäł-ru-łi] nesi-r čuqˤ-no.
be.PRS-PST.PTCP-NMLZ DEM.I-LAT recognize-PST.nWIT
c. [Ža beƛ'q'ˤu b-ac'-ani-x neł-ä łet'i-x
DEM sheep.ABS.IIII III-eat-MASD-AD.ESS DEM.nI-ERG pick-PRS
yäł-ru-łi] nesi-r čuqˤ-no.
be.PRS-PST.PTCP-NMLZ DEM.I-LAT recognize-PST.nWIT
'He recognized that she was picking that sheep to eat.' (K'eneč':10)

(147) *[Ža beƛ'q'ˤu b-ac'-ani-x łet'i-x yäł-ru-łi
DEM sheep.ABS.IIII III-eat-MASD-AD.ESS pick-PRS be.PRS-PST.PTCP-NMLZ
neł-ä] nesi-r čuqˤ-no.
DEM.nI-ERG DEM.I-LAT recognize-PST.nWIT

No material inside the nominalized clause can be dislocated into the matrix clause. Observe the following minimal pair. In (148b), the absolutive demonstrative *ža* appears outside the embedded clause, and the result is ungrammatical:

(148) a. [Ža nesi-s uži yäł-ru-łi]
DEM.ABS(.I) DEM.I-GEN1 boy.ABS.I be.PRS-PST.PTCP-NMLZ
Ø-iy-n.
I-know-PST.nWIT
'He knew that that was his son.' (Babiwn užin Okun:78)
b. *[Nesi-s uži yäł-ru-łi] Ø-iy-n
DEM.I-GEN1 boy.ABS.I be.PRS-PST.PTCP-NMLZ I-know-PST.nWIT
ža.
DEM.ABS(.I)

Negative polarity items inside nominalized clauses cannot be licensed by negation on the main predicate. In (149), the negative polarity adverbial *didurnokin* is appropriately licensed by the negative predicate in the embedded clause; in (150), the negation is too far away from the negative polarity item, and the sentence is ungrammatical, just like its English equivalent.

(149) Učitel-e-r [už-ä darsi didurnokin
teacher-OS-LAT boy-ERG lesson.ABS.III anyhow

b-äy-inč'i-ru-łi] bič'zi r-oq-si.
III-do-NEG-PST.PTCP-NMLZ understand IV-become-PST.WIT
'The teacher understood that the boy did not prepare the lesson at all.'

(150) *Učitel-e-r [už-ä darsi didurnokin
teacher-OS-LAT boy-ERG lesson.ABS.III anyhow
b-äy-ru-łi] bič'zi r-oq-inč'u.
III-do-PST.PTCP-NMLZ understand IV-become-PST.WIT.NEG
("The teacher did not understand that the boy prepared the lesson at all.")

In CH.YY [AGR, LDA], we show that the material inside the nominalized clause cannot interact scopally with the constituents of the matrix clause. Wh-words inside a nominalized complement cannot take scope over the matrix clause. For instance, (151) means 'Did you understand who stole the money?' but not 'Who did you understand stole the money?'.

(151) [łu micxir b-ok'ek'-xosi yäł-ru-łi]
who.ERG money.ABS.III III-steal-PRS.PTCP be.PRS-PST.PTCP-NMLZ
debe-r čuqˀ-ä?
2SG-LAT understand-PST.WIT.INTERR
'Did you understand who was stealing the money?'

Embedded nominalizations can be coordinated. For example:

(152) Xan-e-r bič'zi r-oq-no [elo q'ˀano c'ohor
king-OS-LAT understand IV-become-PST.nWIT there two thief.ABS.I
zäw-ru-łi]-n [sisi-ni-gon el-āy Ø-oxi-n
be.PST-PST.PTCP-NMLZ-and other-DEF.ABS(.I)-CONTR there-ABL I-run-PFV.CVB
Ø-äk'i-ru-łi]-n.
I-go-PST.PTCP-NMLZ-and
'The king understood that there had been two thieves and that the other one had run away from here.' (Q'ˀano guluči sis aqiw esnabi:25)

Nominalized complement clauses typically occur in the object position immediately before the complement-taking verb (preceded by the lative argument), or at the left edge of the sentence, as in (151). In elicitations, native speakers usually place nominalized complement clauses before the verb, but text examples also instantiate postverbal placement.

6 Finite clauses with the enclitic *–ƛin*

6.1 General remarks

The quotative enclitic *–ƛin* (glossed as QUOT) typically serves to mark clausal complements. This enclitic probably developed from a truncated form of the verb *eƛin* 'said.PAST.NON-WITNESSED' (root *eƛ-*). In addition to combining with finite clause, *–ƛin* can also combine with quoted fragments smaller than a clause. In particular, it always appears on proper names when those names are predicative nominals, as in the following example:

(153) Nesi-ƛ' ci-gon ʕUmarqilič-ƛin zow-n.

DEM.I-SUPER.ESS name.ABS.IV-CONTR Umarqilič-QUOT be.PST-PST.nWIT
'His name was Umarqilič.' (ʕAliqilič:1)

This usage is related to the presence of the verb *eƛ-* 'say' in the resultative participial form, which is more often than not omitted. This resultative participle is overt in the following example, where a proper name is introduced:

(154) Sis zow-n-ƛax [Goqi-ƛin eƛ-äsi] miskinaw
one be.PST-PST.nWIT-QUOT Goqi-QUOT say-RES.PTCP poor
žek'u.
person.ABS.I
'Once there lived a poor man called Goqi.' (Goqin zirun:1)

Complements marked with *-ƛin* are extremely common and are selected by a wide variety of verbs, from verbs of speech to propositional attitude verbs to a large number of control verbs. It is probably easier to list the verbs that do not take quotative complements; these include some restructuring predicates, the modal and aspectual verbs discussed in section 3, subject control verbs (section 4.2.2), the verb AGR-*uƛ'*- 'fear; be afraid', the verb AGR-*egir*- 'send', and the verbs *ruhun* AGR-*oq*- 'learn'/ *ruhun* AGR-*od*- 'teach'.

In texts, the embedding verb can be omitted, leaving *-ƛin* as the only signal of reported speech or of the embedded structure; this is particularly common for the verbs of speaking and propositional attitude verbs. As a result, the sentence may contain multiple occurrences of *–ƛin* in the absence of a matrix verb, as in the following example. The first and the last clauses in (155) appear with *–ƛin*, and both represent reported speech, presumably embedded under the presupposed verbs of speaking.

(155) [Ø-eynoy-xo-zo gurow žek'u-r dä-de idu Ø-ič-a
I-work-PRS-ATTR.OBL except person-LAT 1SG-APUD.ESS home I-stay-INF
moči ānu-ƛin], [eniw=babiy-ä nesi-s nesi-r
place.ABS.III be.PRS.NEG-QUOT parents-ERG DEM.I-GEN1 DEM.I-LAT
ƛeli-n teƛ-no], [Ø-eɣe-ni uži maħor
lamb-ABS.III-and give-PFV.CVB I-young-DEF boy.ABS.I outside-LAT
Ø-ox-ir-no], [debe-r r-äti-z-a Ø-ik'i-n
I-run-CAUS-CVB 2SG-LAT IV-want-ATTR.OBL.DIST-VERS I-go-PFV.CVB
ʕumru b-od-o-ƛin].
life.ABS.III III-do-IMPER-QUOT
' "There is no place at my home except for those who work", the parents [said], [then] gave him his little lamb, and chased the youngest son out, [telling him] that he should go where he wants and live [there].' (ƛelä bečed ädiru miskin žek'u:8)

The clause marked by *–ƛin* is finite; the predicate of that clause has tense marking and polarity suffixes. In particular, clauses marked by *–ƛin* can include interrogative marking (156), or imperative marking (155) on the embedded predicate. Although exclamatives do not have a dedicated marker they can also appear with *–ƛin*, as shown in (157).

(156) [Yiła čant-ā-kin an-ä r-ac'-ani-x
DEM.nI bag-IN.ESS-FOC be.PRS.NEG-INTERR IV-eat.TR-MASD-AD.ESS
šebin-ƛin] rok'-ƛ'o-r r-ay-n.
thing.ABS.IV-QUOT heart-SUPER-LAT IV-come-PST.nWIT
'(He) tried to recall whether there was something to eat in that very bag.' (lit.: recalled wasn't there something to eat…) (Ceyes sayɣat:37)

(157) [Waħ žigon šebi-tow nesi-r r-eti-n-ƛin]
whoa again what.ABS.IV-FOC DEM.I-LAT IV-want-PST.nWIT-QUOT
esir-no neł-ä.
ask-PST.nWIT DEM.nI-ERG
'Whoa, what else does he want!?' she exclaimed. (C'irdux:36)

Clauses marked by *–ƛin* can be coordinated:

(158) Di šuƛ'-ir-si [magazine-y-ā-ɣor y-ik'-ān-ƛin]-no
1SG.ERG forget-CAUS-PST.WIT store-OS-IN-VERS II-go-FUT.DEF-QUOT-and
[kaɣat y-eger-ān-ƛin]-no.
letter.ABS.II II-send-FUT.DEF-QUOT-and
'I (woman speaking) forgot to go to the store and to mail a letter.' (lit.: forgot that I was going and that I was sending…)

Clauses set off by *–ƛin* can also occur iteratively; in the following example, the first complement is embedded under a cognition verb, whose own clause is embedded under a verb of speaking:

(159) [[Dä-ł-er ħal-ruħ r-ay-n-ä-ƛin]
1SG-CONT-LAT [health.ABS.III-strength.ABS.III].nIPL nIPL-come-PST.nWIT-INTERR-QUOT
r-iy-r-a r-eti-n-ƛin] eƛi-n cey-ä.
IV-know-CAUS-INF IV-want-PST.nWIT-QUOT say-PST.nWIT eagle-ERG
'The eagle said, 'I want to find out if my might has come back to me.' (based on Ceyes sayɣat:8)

If a given matrix verb has agreement marking, that verb agrees with the complement clause in gender IV. For instance, in (160), the complement clause is in the absolutive position of the complex verb *rok'ƛ'or* AGR-*ay* 'remember, recall (lit.: come upon heart)'. The complement clause is either the subject or the extraposed sentential complement of the unaccusative predicate 'be bad'; if the latter, the predicate agrees with the silent expletive pronoun in gender IV. The two analytical options are shown in (160-i) and (160-ii):

(160) [Mi hemedur q'^{w}aridi y-oq-xo-ƛin] žuka
2SG.ABS(II) so sad II-become-PRS-QUOT.ABS.IV bad
r-oq-si.
IV-become-PST.WIT
'It was not good that you (speaking to a woman) were so sad.'
i. [Mi hemedur q'^{w}aridi yoqxoƛin] žuka r-oqsi.
SENTENTIAL SUBJECT PREDICATE
ii. *expl* [mi hemedur q'^{w}aridi yoqxoƛin] žuka r-oqsi.

SUBJECT EXTRAPOSED COMPLEMENT PREDICATE

In the following example, a finite clausal complement is embedded under the conditional AGR-*esu-näy*, and the embedding verb agrees with the complement in gender IV:

(161) [Debe-q kid y-od-ir-oƛ-ƛin] r-esu-näy…
[2SG-POSS.ESS girl.ABS.II II-do-CAUS-POT-QUOT].ABS.IV IV-appear-COND.CVB
'If you could have a daughter…'

An absolutive constituent inside a quotative complement can never induce long-distance agreement, which makes these clauses different from the nominalized complements, as shown in (162). Example (162b) is minimally different from (162a) in that the complex matrix verb *harizi AGR-od-* agrees with the embedded absolutive *baša* in gender III, but because LDA is impossible over the quotative, this agreement renders the sentence ungrammatical.

(162) a. [Behizi r-oq-näy, dä-q baša
possible IV-become-COND.CVB 1SG-POSS.ESS finger.ABS.III
b-ati-n-ƛin] di debe-q harizi r-oy-x.
III-put-PROH-QUOT 1SG.ERG 2SG-POSS.ESS request IV-do-PRS
'If possible don't touch me, I am begging you.' (Xanno, nesisgon łʿono užin:108)
b. *[Dä-q baša b-äti-n-ƛin] di
1SG-POSS.ESS finger.ABS.III III-put-PROH-QUOT 1SG.ERG
debe-q harizi b-oy-x.
2SG-POSS.ESS request III-do-PRS

Constituents of the clause with the quotative marker cannot interact scopally with constituents of the higher clause. In particular, a negative verb that takes a finite complement clause cannot license negative polarity items inside that complement clause; thus, in (163), the negative polarity item *sidxokin* 'anyone' cannot be licensed by negation on the higher verb:

(163) *Eniw razi y-oq-inč'u [kid sid-xo-kin
mother.ABS.II agree II-become-PST.NEG girl.ABS.II one.OBL-AD.ESS-FOC
y-egir-xo-ƛin].
II-send-PRS-QUOT
('Mother did not agree to marry (lit.: send) the girl off to anyone.')

No material from a finite complement can be dislocated into the matrix clause. Compare the well-formed example (156) above and its ungrammatical counterpart where the locative constituent *yiła čantākin* is dislocated to the matrix clause:

(164) *[An-ä r-ac'-ani-x šebin-ƛin]
be.PRS.NEG-INTERR IV-eat.TR-MASD-AD.ESS thing.ABS.IV-QUOT
yiła čant-ā-kin rok'-ƛ'or r-ay-n.
DEM.nI bag-IN.ESS-FOC heart-SUPER-LAT IV-come-PST.nWIT
('(He) tried to recall whether there was something to eat in that very bag.')

Typically, a clause marked with *-ƛin* linearly precedes the verb that takes that complement, but the complement can also appear further to the left of its selecting verb. The availability of a postverbal position for a clause marked by the quotative varies depending on the type of the matrix verb. For instance, building on example (159), the following order, where the predicate *riyra retin* 'want to know' precedes the quotative complement, is unacceptable:

(165) #Dä-r r-iy-r-a r-eti-n dä-ł-er
1SG-LAT IV-know-CAUS-INF IV-want-PST.nWIT 1SG-CONT-LAT
ħal-ruħ r-ay-n-ä-ƛin.
[health.ABS.III-strength.ABS.III].nIPL nIPL-come-PST.nWIT-INTERR-QUOT
('I want to find out if my might has come back to me.')

With verbs of speech and propositional attitude verbs, finite clausal complements can follow the verb quite easily. Building on example (159) again, the orders in (166a, b) are both quite common (with a pause between the matrix verb and the rest of the sentence, indicated by # below):

(166) a. Cey-ä eƛi-n# dä-ł-er ħal-ruħ
eagle-ERG say-PST.nWIT 1SG-CONT-LAT [health.ABS.III-strength.ABS.III].nIPL
r-ay-n-ä-ƛin r-iy-r-a r-eti-n-ƛin.
nIPL-come-PST.nWIT-INTERR-QUOT IV-know-CAUS-INF IV-want-PST.nWIT-QUOT
'The eagle said, "I want to find out if my might has come back to me."'
b. Cey-ä pikru b-oy-n# dä-ł-er
eagle-ERG thought.ABS.III III-do-PST.nWIT 1SG-CONT-LAT
ħal-ruħ r-ay-n-ä-ƛin.
[health.ABS.III-strength.ABS.III].nIPL nIPL-come-PST.nWIT-INTERR-QUOT
'The eagle was thinking, "Has my might come back to me?"'

6.2 Two functions of *-ƛin*

So far we have concentrated on general properties of quotative clauses without establishing more fine-grained distinctions, in particular, treating matrix verbs that can combine with quotative clauses as a homogeneous class. This was a simplification however. Consider the following contrast. Example (167) shows a root clause, where the word order is completely free (we do not show all the orders because the relevant factor is what appears in the final position).

(167) a. Di magazine-y-ā-ɣor y-ik'-ān.
1SG.ABS(.II) store-OS-IN-VERS II-go-FUT.DEF
b. Magazine-y-ā-ɣor y-ik'-ān di.
store-OS-IN-VERS II-go-FUT.DEF 1SG.ABS(.II)
c. Di y-ik'-ān magazine-y-ā-ɣor.
1SG.ABS(.II) II-go-FUT.DEF store-OS-IN-VERS
'I (woman speaking) am going to the store.'

Depending on the matrix verb, the word order possibilities for a clause like (167) combined with the quotative enclitic vary. In (168), where the matrix verb is 'to complain', all the orders available in the matrix clause are possible in the clause marked with *–ƛin*:

(168) a. Di ʕarza boy-s [di magazine-y-ā-ɣor
1SG.ERG complain-PST.WIT 1SG.ABS(.II) store-OS-IN-VERS
y-ik'-ān-ƛin].
II-go-FUT.DEF-QUOT
'I (woman speaking) complained that I have to go to the store.'

b. Di ʕarza boy-s [magazine-y-ā-ɣor
1SG.ERG complain-PST.WIT store-OS-IN-VERS-QUOT
y-ik'-ān di-ƛin].
II-go-FUT.DEF 1SG.ABS(.II)-QUOT
'I (woman speaking) complained that I have to go to the store.'

c. Di ʕarza boy-s [di y-ik'-ān
1SG.ERG complain-PST.WIT 1SG.ABS(.II) II-go-FUT.DEF
magazine-y-ā-ɣor-ƛin].
store-OS-IN-VERS-QUOT
'I (woman speaking) complained that I have to go to the store.'

Furthermore, in such sentences, *–ƛin* can occur more than once:

(169) Di ʕarza boy-s [di-ƛin magazine-y-ā-ɣor
1SG.ERG complain-PST.WIT 1SG.ABS(.II)-QUOT store-OS-IN-VERS
y-ik'-ān-ƛin].
II-go-FUT.DEF-QUOT
'I (woman speaking) complained that I have to go to the store.'

But in the following examples, with the matrix verb 'to forget', only one word order is possible in the embedded clause, verb-final (other constituents in the embedded clause can switch the order as long as they precede the verb):

(170) a. Di šuƛ'-ir-si [di magazine-y-ā-ɣor
1SG.ERG forget-CAUS-PST.WIT 1SG.ABS(.II) store-OS-IN-VERS
y-ik'-ān-ƛin].
II-go-FUT.DEF-QUOT
'I (woman speaking) forgot to go to the store.' (lit.: that I was going to the store)

b. *Di šuƛ'-ir-si [magazine-y-ā-ɣor
1SG.ERG forget-CAUS-ST.WIT store-OS-IN-VERS-QUOT
y-ik'-ān di-ƛin].
II-go-FUT.DEF 1SG.ABS(.II)-QUOT
'I (woman speaking) forgot that I have to go to the store.'

c. *Di šuƛ'-ir-si [di y-ik'-ān
1SG.ERG forget-CAUS-PST.WIT 1SG.ABS(.II) II-go-FUT.DEF
magazine-y-ā-ɣor-ƛin].
store-OS-IN-VERS-QUOT

The doubling of the enclitic, as in (169), is impossible:

(171) Di šuƛ'-ir-si [di-(*ƛin) magazine-y-ā-ɣor
1SG.ERG forget-CAUS-PST.WIT 1SG.ABS(.II)-QUOT store-OS-IN-VERS
y-ik'-ān-ƛin].
II-go-FUT.DEF-QUOT
'I (woman speaking) forgot to go to the store.' (lit.: that I was going to the store)

The difference between 'complain' and 'forget' is that the latter verb requires a genuine embedded clause, i.e., a clausal complement, whereas 'complain' (as well as 'say') is more flexible, being compatible with a complement clause and a direct quotation. Compare a similar contrast in English:

(172) a. She complained, 'Oh, I need to go to the grocery store'.
b. She complained that she needed to go to the grocery store.
(173) a. *She forgot, 'Oh, I need to go to the grocery store'.
b. She forgot that she needed to go to the grocery store.

The enclitic *–ƛin* appears in both contexts, introducing a complement clause and introducing direct quotation (DQ). This means that it has two distinct functions: (i) marking genuine complementation, as a complementizer introducing a finite clausal complement (FCC below); and (ii) introducing quoted direct speech (DQ). Unambiguously embedding predicates such as 'forget' or 'want' require that their embedded clauses have a strictly verb-final order, which is consistent with the word order of all other embeddings in Tsez (relative clauses, infinitival and masdar clauses, and nominalized clauses). When *–ƛin* marks a direct quotation, that clause is not embedded, which is why all word orders available in independent (root) clauses are still possible.

If we now turn to those verbs that allow both finite complement clauses and direct quotation, a question arises as to how complementation and direct quotation can be distinguished. Unless the word order is straightforward, as in (174) below, it is not immediately obvious which function *–ƛin* serves in these cases (and, consequently, what type of clause the matrix verb takes, DQ or FCC).

(174) [Dä-z ža-s halmaɣ-bi yoł yizi-ƛin]
1SG-GEN2 son-GEN1 friend-PL.ABS.IPL be.PRS DEM.IPL.ABS-QUOT
esi-n nes-ä Ražbadin-qo.
say-PST.nWIT DEM.I-ERG Rajbaddin-POSS.ESS
'"They are my son's friends," he said to Rajbaddin.' (Ražbadinno, Tawadin:165)

That leaves a large body of clauses marked with *–ƛin* that are ambiguous between a finite-complement-clause interpretation and direct quotation. A similar functional ambiguity is observed in Tatar, where the respective quotative marker is ambiguous between a complementizer and an introducer of direct speech (Podobryaev 2014). Yet another, more complex diagnostic separating FCC and DQ (and accordingly, the two functions of *–ƛin*) stems from the phenomenon of indexical shift, which we turn to below.

6.3 Indexical shift in finite complement clauses

Consider the following Tsez sentence:

(175) Irbahin-ä [di ʕayibiyaw yoł-ƛin] eƛi-x.
Ibrahim-ERG 1SG.ABS wrong/foolish be.PRS-QUOT say-PRS
(i) 'Ibrahim says that I was wrong.'
(ii) 'Ibrahim$_i$ says that he$_i$ was wrong.'

The interpretation of this sentence relies on the interpretation of the indexical *I.* In general terms, an *indexical expression* is a word or phrase whose meaning is not determined in the lexicon; instead, its reference is associated with different referents or meanings on different occasions. Indexical expressions include first and second person pronouns, as well as deictic words such as *today, now, here,* or *that.*[17]

In English, the literal translation of (175) is unambiguous; it can only mean "Ibrahim says that I was wrong". The meaning of *I* is fixed by the reference to *the speaker of the utterance*, never in reference to the *attitude holder* (Ibrahim). In Tsez, however, (175) is ambiguous out of context. It could either mean that the speaker of the utterance is wrong (i) or that Ibrahim, the speaker in the reported context (~attiude holder), is wrong (ii). In other words, the utterance context calls for interpretation (i), because all the indices in the utterance are interpreted in relation to the speaker (*I*); meanwhile the local context imposes interpretation (ii). This latter interpretation involves *indexical shift*: a shift in the interpretation of the indexical expression (in this case *I*) from the (expected) utterance context to the context of Ibrahim's speech act.

(176) *Indexical shift*
A phenomenon wherein the semantic value of an indexical expression can be changed from being determined by the utterance context to being determnined by the context of the reported speech act

Under undexical shift, one can observe two readings, not one; the expected reading, determined by the context (we will be referring to it as indexical reading, IR), and the shifted reading (SR), which is made available by the context of the reported speech act, with the attitude holder rather than the speaker of the utterance serving as the reference point.

The phenomenon of indexical shift, which philosophers of language have explicitly rejected (see Kaplan 1977; 1979/1989) on the assumption that the semantic values of *I, you* or *now* are innately identified with their referents, has nevertheless proven quite pervasive across a number of languages. So far, it has been documented in Navajo (Speas 1999), Donno So (Culy 1994), Amharic (Schlenker 1999, 2003), Nez Perce (Deal 2012), Matses (Munro et al. 2012), Slave

[17] Another way to capture the shifting nature of indexicals is to analyze them as having two kinds of meaning (Kaplan 1989, a.o.). The first kind of meaning is often called 'character' or 'linguistic meaning'; the second sort is often called 'content'. Using this terminology, we can say that *I* has a single character (or linguistic meaning), but may have different contents depending on the context.

(Rice 1986), Uyghur (Sudo 2012; Shklovsky and Sudo 2014), Zazaki (Anand 2006; Anand and Nevins 2004), Tatar (Podobryaev 2014), Aghem (Hyman 1988; Hyman and Polinsky 2009), Gokana (Hyman and Comrie 1981), several other West African languages (Nikitina 2012, 2013), and a number of sign languages (Zucchi 2004, Quer 2005). Within Nakh-Dagestanian, indexical shift (not under that name) has been documented at least in Hinuq (Forker 2013: 662-664), a language closely related to Tsez; in Udi (Schütze 1994: 500); in Kryz (Authier 2009: 289ff.); in Chechen (Nichols 1994a: 61), and in Ingush (Nichols 1994b: 128).

6.3.1 Indexical shift contexts

Tsez clearly belongs on the list of indexical-shifting languages. Indexical shift from the speaker to an attitude holder is permitted in, and only in, finite complement clauses. This is where the difference between such clauses and direct quotation becomes relevant again. Compare the following example (a variation on example (168) above):

(177) a. Mariyat-ä ʕarza boy-s [di magazine-y-ā-ɣor
Mariyat-ERG complain-PST.WIT 1SG.ABS(.II) store-OS-IN-VERS
y-ik'-ān-ƛin].
II-go-FUT.DEF-QUOT
'Mariyat complained that I have to go to the store.' (IR)
'Mariyat complained that she has to go to the store.' (SR)

b. Mariyat-ä ʕarza boy-s [magazine-y-ā-ɣor
Mariyat-ERG complain-PST.WIT store-OS-IN-VERS-QUOT
y-ik'-ān di-ƛin].
II-go-FUT.DEF 1SG.ABS(.II)-QUOT
'Mariyat complained, "I have to go to the store."' = 'Mariyat complained that she has to go to the store.'
NOT: 'Mariyat complained that I have to go to the store.' (IR)

c. Mariyat-ä ʕarza boy-s [di y-ik'-ān
Mariyat-ERG complain-PST.WIT 1SG.ABS(.II) II-go-FUT.DEF
magazine-y-ā-ɣor-ƛin].
store-OS-IN-VERS-QUOT
'Mariyat complained, "I have to go to the store."'' = 'Mariyat complained that she has to go to the store.'
NOT: 'Mariyat complained that I have to go to the store.' (IR)

These examples show that indexical shift is possible only under genuine embedding (which is signaled by the surface verb-final order) but not under direct quotation as in (177b,c).

Further, indexical shift is possible only under finite-clause embedding, not in other types of embedded clauses. Compare the finite clause in (178a), which allows indexical shift, to the nominalized clause in (178b), which does not.

(178) a. Žoy-ä neło-qo-r [babiy-ä di
lad-ERG DEM.nI-POSS-LAT father-ERG 1SG.ABS(.I)
Ø-egir-si-ƛin] esi-n.
I-send-PST.WIT-QUOT tell-PST.nWIT

(i) ‘The youngster told her that the father had sent me.’ (IR)
(ii) ‘The youngster$_i$ told her that the father had sent him$_i$.’ (SR)

b. Žoy-ä neło-qo-r [babiy-ä di
lad-ERG DEM.nI-POSS-LAT father-ERG 1SG.ABS(.I)
Ø-egä-ru-łi] esi-n.
I-send-PST.PTCP-NMLZ tell-PST.nWIT
‘The youngster told her that the father had sent me.’ (IR)
NOT: ‘The youngster$_i$ told her that the father had sent him$_i$.’ (SR)

Indexical shift is possible only within complements embedded under certain propositional attitude and speech verbs. With other verbs, indexical shift is unacceptable. For example, it is impossible with the verb ‘try, attempt’, as in the next example:

(179) [Di nesi-x y-ik’-inč’u-ƛin] xan-e-z kid-b-ä
1SG.ABS(.II) DEM.I-AD.ESS II-go-FUT.NEG-QUOT king-OS-GEN2 girl-OS-ERG
xalbiki b-odi-n.
attempt.ABS.III III-do-PST.nWIT
‘The king’s daughter tried to make sure that I (woman speaking) would not marry him.’
NOT: ‘The king’s daughter tried not to marry him.’

The verbs that allow indexical shift are as follows:[18]

(180) Verbs that allow indexical shift
a. AGR-ukad- ‘see’; moƛax AGR-ukad- ‘see in a dream’
b. bičzi rod- ‘explain’
c. buž(z)i AGR-oq- ‘believe’
d. eƛ- ‘say’
e. es- ‘tell’; heresi es- ‘lie’
f. esir- ‘ask’
g. harizi rod- ‘request, ask’
h. kul er- ‘hope’
i. ƛ’iräy AGR-oɣ- ‘apologize’ (lit.: pull someone from above)
j. ƛ’iräy AGR-oq- ‘be forgiven’ (lit.: from above become)
k. ƛ’iri ris- ‘promise’ (lit.: take upon)
l. pikru bod- ‘think’ (lit.: do thought)
m. pˁaƛanad- ‘brag, lie’
n. rok’u roƛ- ‘worry’ (lit.: heart hurts)
o. šuƛ’-/ šuƛ’-ir- ‘be forgotten/forget’
p. N+ teƛ- ‘give’
izmu teƛ- ‘allow, permit’ (lit.: give permission)
rožі teƛ- ‘promise’ (lit.: give word)

[18] This list may not be exhaustive; it was established on the basis of narrative texts and elicitations, but we cannot exclude the possibility that other verbs may also permit indexical shift.

q. t'et'r- 'read'
r. ʕarza bod- 'complain' (lit.: make complaint)

Only *personal pronouns shift*, regardless of their function in the embedded clause. We have already seen examples of a shifted pronoun in the subject position; in the next sentence it appears as the adnominal genitive:

(181) [Dey uži ħalaq' Ø-oq-xo Ø-ik'i-x-ƛin]
1SG.GEN1 boy.ABS.I skinny I-become-IPFV.CVB I-go-PRS-QUOT
neł-ä eƛi-s.
DEM.nI-ERG say-PST.WIT
'She said that my son is getting skinnier and skinnier.' (IR)
'She$_i$ said that her$_i$ son is getting skinnier and skinnier.' (SR)

This example indicates that the structural position of the pronoun does not affect the possibility of indexical shift.

Next, indexical shift is equally possible for second person pronouns, for example:

(182) Irbahin-ä zarema-qo-r [mi ƛ'ir-āy
Ibrahim-ERG Zarema-POSS-LAT 2SG.ABS(.II) above-ABL
y-oq-si- ƛin] esi-s.
II-become-PST.WIT-QUOT tell-PST.WIT
'Ibrahim told Zarema that you (female addressee) are forgiven.' (IR)
'Ibrahim told Zarema$_i$ that she$_i$ was forgiven.' (SR)
(183) [Debe-r r-oq-si-ƛin] ƛ'ir-äy ža
2SG-LAT nIPL-become-PST.WIT-QUOT above-ABL DEM.ABS(.II)
y-oɣ-no.[19]
II-pull-PST.nWIT
'(They) apologized to her for treating you badly.' (IR)
'(They) apologized to her for treating her badly.' (SR) (Isis rigłi:15)

Since Tsez freely allows the omission of argument (and adjunct) noun phrases, a question arises: is the same sentence ambiguous with a null pronoun? As (184) shows, it is not only ambiguous, but also has additional, unanticipated interpretations (the addressee of the utterance was wrong; a third party was wrong):

(184) Irbahin-ä [*pro* ʕayibiyaw yoł-ƛin] eƛi-x.
Ibrahim-ERG 1SG.ABS wrong/foolish be.PRS-QUOT say-PRS
'Ibrahim says that I was wrong.' (IR)
'Ibrahim says that you were wrong.' (IR)

[19] In the context of the fairy tale from which this sentence it is taken, it is unambiguously interpreted as shifted. The verb AGR-*oq*- 'become' is used in the embedded clause of an idiomatic reading; with a lative object, it means 'to be unpleasant/nasty to someone'.

‘Ibrahim$_i$ says that he$_i$ was wrong.’
‘Ibrahim$_i$ says that he$_j$/she/they was/were wrong.’

While personal pronouns shift, the index of temporal or locative deictic expressions does not. In (185), *ɣude* ‘tomorrow’ could in principle mean ‘the day after the moment of the utterance [now]’ or ‘last Sunday’. Yet the sentence below can describe Ibrahim’s, not the speaker’s plans, and still refer to the day after the time of the utterance, not the Sunday of last week. The direct-quotation reading is the only one where *ɣude* refers to the previous Sunday.

(185) [Di ɣude kino-me-ł-xor Ø-ik’-ān-ƛin] eƛ’i
1SG.ABS(.I) tomorrow movie-OS-CONT-VERS I-go-FUT.DEF-QUOT past
šamat-ƛ’o eƛi-s irbahin-ä.
Saturday-SUPER.ESS say-PST.WIT Ibrahim-ERG
(i) ‘Ibrahim said last Saturday that I was going to the movies tomorrow.’ (IR)
(ii) ‘Ibrahim said last Saturday that he was going to the movies tomorrow.’ (SR)
(iii) ‘Ibrahim said last Saturday, “I am going to the movies tomorrow.”’ (DQ)

In (186) we find the adverb *elo*, which is potentially ambiguous between ‘here’ and ‘there’. Regardless of the interpretation of the sentence as indexical or shifted, this adverb still has the same interpretation, indicating that locative deictic phrases do not shift either.

(186) [Elo dä-q q’ˤano k’onk’a zow-n-ƛin]
there 1SG-POSS.ESS two bicycle.ABS.III be.PST-PST.nWIT-QUOT
nesi-r bič’zi r-oq-no.
DEM.I-LAT understand IV-become-PST.nWIT
‘He understood that I must have had two bicycles there/here.’
‘He$_i$ understood that he$_i$ must have had two bicycles there/here.’

These examples show that indexical shift is not a free-for-all process and is constrained by certain principles. The restriction against shifting the meaning of ‘tomorrow’ is not unique to Tsez (Navajo seems to have the same restriction, see Speas 1999). However, less is known about the properties of indexical shift beyond the domain of pronouns, so cross-linguistic generalizations in this domain may be premature.

Overall, indexical shift is very common in texts and in spontaneous discourse. Occasionally, when several clausal complements occur one after another, it is possible to see an embedding with demonstratives, where no possibility for shifting exists, followed by another embedded complement with first or second pronoun, which does allow for indexical shift. Here is a typical example from a text:

(187) Tawad-ä harizi r-odi-n Ražbadin-qo
Tawadi-ERG request.ABS.IV IV-do-PST.nWIT Rajbaddin-POSS.ESS
[nesi-s-no halmaɣ-łi-s-no siršaɣˤa ħadur
DEM.I-GEN1-and friend-NMLZ-GEN1-and horses.ABS.nIPL ready
r-od-o-ƛin],
nIPL-do-IMPER-QUOT

[žedu	howži-tow	xizo-q’ˁim-e-r	b-uti-n	b-ik’-a
1PL.ABS.IPL	now-FOC	back-OS-LAT	IPL-turn-PFV.CVB	IPL-go-INF

b-āy-x-ƛin].
IPL-must-PRS-QUOT
‘Tawadi$_i$ asked Rajbaddin$_j$ to get his$_i$ and the friends$_k$’ horses ready, [and said] “We$_{i+j+k}$ must go back right away.”’ (Ražbadinno Tawadin:85)

The first embedded clause (*nesisno halmayłisno siršayˁa ħadur rodoƛin*) includes a demonstrative, which is interpreted as coreferential with the subject of the main clause (*Tawadi*); this is consistent with the generalizations outlined above. The addressee is also male, so there is a potential for ambiguity, but the absence of *–tow* signals coreference with the subject, not the addressee. The embedded clause is closed off by *–ƛin.* In the next embedded clause, presumably embedded under the presupposed verb *eƛin* ‘said’, we find the first person pronoun *žedu*, which is shifted; its index is associated with the attitude holder and his referential group, not the speaker and hearer of the utterance. Examples like this indicate that indexical shift is clause-bound and does not spread over the entire discourse. However, the order of embedded clauses that places the non-shifted clause before the shifted clause (no shift >> shift) is strongly preferred over the opposite order (shift >> no shift).

6.3.2 Properties of indexical shift in Tsez

Studies of indexical shift have uncovered a number of recurring properties associated with such shifting, and in this section, we will present several such properties which are found in Tsez as well. The presence of these properties offers further support for the conclusion that Tsez indeed has indexical shift.

The first such property involves the distinction between *de dicto* (‘what is said’) and *de re* (“related to a particular thing”) descriptions (Quine 1980). Suppose Mary knows of Bill under two guises. Under one, which could be the guise of the company boss, Mary thinks of Bill as a conscientious character who would not engage in rummaging through people’s offices in the evening and blogging or tweeting about what was found there. Under the other guise, the person she saw sneaking out of her office late in the evening, she thinks of him as a suspicious character nosing around. The first guise is associated with the term ‘Boss’, and the second, with the term ‘Snitch’. On that distinction, the following sentence is false; it is impossible to alternate ‘Boss’ and ‘Snitch’ freely without violating the truth conditions on Mary’s beliefs:

(188) Mary believes that the Boss is the Snitch.

The infelicity of (188) is the key to the semantic distinction between de dicto and de re construals:

(189) Semantically *de re*/*de dicto*:
An expression is *semantically de re* only in the case that it permits substitution of a co-designating term without the violation of truth conditions (*salva veritate*). Otherwise, it is *semantically de dicto*.

Quotations do not support *de re* construal, under which a noun phrase is interpreted as denoting a

specific individual. Imagine that Ibrahim met Ali but does not know that Ali is actually the boss. The English sentence in (190a) would then be inappropriate to describe Ibrahim's encounter, because the noun phrase *the boss* must be interpreted *de dicto*. Instead, (190b) should be used.

(190) a. Ibrahim said, "I have spoken to the boss of the company."
b. Ibrahim said, "I have spoken to Ali."

But in Tsez, if the speaker wants to describe to a third party that Ibrahim has spoken to Ali, the equivalent of (190a) is completely felicitous:[20]

(191) [Di ħakim-qo xabaryay-si-ƛin] dä-q eƛi-s
1SG.ABS(.I) boss-POSS.ESS talk-PST.WIT-QUOT 1SG-POSS.ESS say-pst.WIT
irbahin-ä.
Ibrahim-ERG
'Ibrahim told me that he had talked to Ali.' (lit.: I spoke to the boss)

Thus, the description 'the boss' in (191) is interpreted *de re*, despite the presence of the quotative marker on the embedded clause. This indicates that the clause marked by *–ƛin* is a genuine embedding, and one that allows indexical shifting.

Next, wh-words in genuine quotatives do not interact with the material of a higher clause. In the following English sentences, *what* in the quoted question does not take scope over the word *say:*

(192) a. Ibrahim said, "What don't you understand?"
b. Did Ibrahim say, "What don't you understand?'

In Tsez, however, the corresponding sentence involves indexical shift and *šebi* 'what' takes scope over the *eƛ-:*

(193) Irbaħin-ä [dä-r šebi r-iy-x-ānu-ƛin]
Ibrahim-ERG 1SG-LAT what.ABS.IV IV-know-PRS-NEG-QUOT
eƛ-ä?
say-PST.WIT.INTERR
'What did Ibrahim say that I did not know?' (IR)
'What did Ibrahim$_i$ say that he$_i$ did not know?' (SR)

Another recurrent property of indexical shift is the property known as *shift-together.* If a finite clausal complement includes a first and a second person pronoun, these pronouns either do not shift, or have to shift together. In the following sentence, only two interpretations are possible:[21]

(194) Irbaħin-ä zarema-q-or [di dow-ƛ'o-r

[20] See Deal (2012) for similar observations in Nez Perce.
[21] The embedded verb in (194) overtly marks gender agreement. If the speaker of that utterance is a woman, ambiguity does not arise and only the shifted interpretation is possible (the embedded verb would have to be marked for gender II to reference the female speaker).

Ibrahim-ERG Zarema-POSS-LAT 1SG.ABS(.I) 2SG-SUPER-LAT
bixzi Ø-oq-si-ƛin] eƛi-s.
angry I-become-PST.WIT-QUOT say-PST.WIT
'Ibrahim told Zarema that I was angry with you.' (IR)
'Ibrahim$_i$ told Zarema$_k$ that he$_i$ was angry with her$_k$.' (SR)
NOT: 'Ibrahim$_i$ told Zarema$_k$ that he$_i$ was angry with you.'
NOT: 'Ibrahim$_i$ told Zarema$_k$ that I was angry with her$_k$.'

Likewise, if an embedded clause has two instances of the same pronoun, both have to be indexical or both have to shift. It is impossible to have just one shifted item.

(195) [Dä-z eniw=babi-y-ä di becizi Ø-oy-x-ƛin]
1SG-GEN2 parents-ERG 1SG.ABS(.I) praise I-do-PRS-QUOT
Irbaħin-ä eƛi-s.
Ibrahim-ERG say-PST.WIT
'Ibrahim said that my parents are praising me.' (IR)
'Ibrahim$_i$ said that his$_i$ parents are praising him$_i$.' (SR)
NOT: 'Ibrahim$_i$ said that my parents are praising him$_i$.'
NOT 'Ibrahim$_i$ said that his$_i$ parents are praising me.'

These shift-together facts are consistent with observations on indexical shift in other languages, where the same constraint applies (see Anand and Nevins 2006 for Zazaki; Podobryaev 2014 for Tatar). The existence of this constraint suggests that the mechanism that is responsible for indexical shift takes scope over the entire embedded clause, not just a particular pronoun.

So far we have concentrated on singular pronouns. The data on plural pronouns are much less clear; since Tsez does not have inclusive/exclusive distinctions in the plural, indexical shift is not as apparent. When a plural personal pronoun is used, there is often a possibility that the attitude holder is included in the relevant group. However, in contexts where the contrast is presented in such a way that the attitude holder and the referents of the plural pronoun are well differentiated, both readings are possible, just like in the singular:

(196) [El-ä q'ˤuna-n yedu ħalt'i b-oy-s-ƛin]
1PL-ERG two-COLL DEM work.ABS.III III-do-PST.WIT-QUOT
zarema-ƛ'o-r ħakim-qo-r eƛi-s irbahin-ä.
Zarema-SUPER-LAT boss-POSS-LAT say-PST.WIT Ibrahim-ERG
'Ibrahim$_i$ told the boss$_j$ about Zarema$_k$ that the two of them$_{i+k}$ had done that work.'

(197) [Elu-s iħu teɬersi yoɬ-ƛin] ƛirba-z-ä elu-qo-r
1PL-GEN1 river.ABS.III deep be.PRS-QUOT guest-OS.PL-ERG 1PL-POSS-LAT
bičzi r-oy-xosi zow-s.
explain IV-do-PRS.PTCP AUX.PST-PST.WIT
'The guests were explaining to us that our river is deep.' (IR)
'The guests$_i$ were explaining to us that their$_i$ river is deep.' (SR)

Let us now turn to the encoding of third persons. To indicate third persons, Tsez uses only demonstratives. Recall that there are no third person pronouns except the silent one (*pro*); that

silent pronoun can participate in indexical shift, as shown above in example (184). Embedded demonstratives however can never refer to utterance speakers and their addressees. As for the attitude holder and his/her addressee, those referents can be expressed by demonstratives in finite embedded clauses. Compare the now familiar example with a demonstrative in place of the first person pronoun:

(198) Irbahin-ä [ža ʕayibiyaw yoł-ƛin] eƛi-x.
Ibrahim-ERG DEM.ABS wrong/foolish be.PRS-QUOT say-PRS
'Ibrahim$_i$ says that he$_{i/j}$ was wrong.'

Example (198) is ambiguous: *ža* may refer to the attitude holder or to yet another third person. Because it is impossible to tell whether there is an omitted argument represented by a pronoun or a demonstrative, we find the same type of ambiguity in sentences with argument drop; consider the example with multiple ambiguity in (184) above.

6.3.3 Forcing or avoiding indexical shift

Let us revisit the sentence that we started this discussion with:

(199) Irbahin-ä [di ʕayibiyaw yoł-ƛin] eƛi-x.
Ibrahim-ERG 1SG.ABS wrong/foolish be.PRS-QUOT say-PRS
'Ibrahim says that I was wrong.' (IR)
'Ibrahim$_i$ says that he$_i$ was wrong.' (SR)

Of course, sentences of the sort discussed here are not always ambiguous, and it takes serious elicitation work to explore the possibilities present in Tsez, or any other language for that matter. In addition to the general context, which comes to the rescue when ambiguities between indexical and shifted interpretations arise, two disambiguating strategies deserve mention here: use of the focus particle *–tow* and agreement.

The use of the focus enclitic *–tow* is a allows Tsez speakers to distinguish the indexical and the shifted readings leaving no room for ambiguity. The presence of *–tow* on a potentially ambiguous pronoun categorically blocks the indexical interpretation. In other words, -*tow* blocks the indexical reading.

(200) If a potentially ambiguous pronoun in a finite complement clause is marked with the focus enclitic *–tow*, only the shifted interpretation is possible.

Compare (201a) and (201b) for first person and (202a) and (202b) for second person:

(201) a. Nes-ä [dä-q q'ˤanoquno ƛeb yoł-ƛin]
DEM.I-ERG 1SG-POSS.ESS forty year.ABS.III be.PRS-QUOT
eƛi-s.
say-PST.WIT
'He said that I was 40 years old.' (IR)
'He$_i$ said that he$_i$ was 40 years old.' (SR)
b. Nes-ä [dä-q-tow q'ˤanoquno ƛeb yoł-ƛin]

DEM.I-ERG 1SG-POSS.ESS-FOC forty year.ABS.III be.PRS-QUOT
eƛi-s.
say-PST.WIT
'He$_i$ said that he$_i$ was 40 years old.' (SR)
NOT: 'He$_i$ said that I was 40 years old.' (IR)

(202) a. Di Sult'an-e-r [dow-de sadaq šahar-y-ā-ɣor
1SG.ERG Sultan-OS-LAT 2SG-APUD.ESS with city-OS-IN-VERS
Ø-ik'-ān-ƛin] rožī teƛ-si.
I-go-FUT.DEF-QUOT word.ABS.IV give-PST.WIT
'I (man speaking) promised Sultan to go to the city with you.' (IR)
'I (man speaking) promised Sultan$_i$ to go to the city with him$_i$.' (SR)

b. Di Sult'an-e-r [dow-de-tow sadaq šahar-y-ā-ɣor
1SG.ERG Sultan-OS-LAT 2SG-APUD.ESS-FOC with city-OS-IN-VERS
Ø-ik'-ān-ƛin] rožī teƛ-si.
I-go-FUT.DEF-QUOT word.ABS.IV give-PST.WIT
'I (man speaking) promised Sultan$_i$ to go to the city with him$_i$.' (SR)
NOT: 'I promised Sultan to go to the city with you.' (IR)

When an embedded clause includes more than one pronoun that could potentially undergo indexical shift, the enclitic can appear on all of them or on just one of them. It usually appears on the pronoun that is structurally more prominent, but that does not seem to be a categorical constraint. Compare the well-accepted (203a,b) and the more marginal, albeit not impossible, (203c):

(203) a. Irbaħin-ä Zarema-q-or [di-tow
Ibrahim-ERG Zarema-POSS-LAT 1SG.ABS(.I)-FOC
dow-ƛ'o-r-tow bixzi Ø-oq-si-ƛin] eƛi-s.
2SG-SUPER-LA-FOC angry I-become-PST.WIT-QUOT say-PST.WIT

b. Irbaħin-ä Zarema-q-or [di-tow dow-ƛ'o-r
Ibrahim-ERG Zarema-POSS-LAT 1SG.ABS(.I)-FOC 2SG-SUPER-LAT
bixzi Ø-oq-si-ƛin] eƛi-s.
angry I-become-PST.WIT-QUOT say-PST.WIT

c. ?Irbaħin-ä Zarema-q-or [di dow-ƛ'o-r-tow
Ibrahim-ERG Zarema-POSS-LAT 1SG.ABS(.I) 2SG-SUPER-LAT-FOC
bixzi Ø-oq-si-ƛin] eƛi-s.
angry I-become-PST.WIT-QUOT say-PST.WIT
'Ibrahim$_i$ told Zarema$_k$ that he$_i$ was angry with her$_k$.' (SR)

However if the particle *–tow* appears on some other constituent, not on one of the expressions whose reference can shift, it does not interact with indexical interpretations and cannot block the indexical reading. Thus, the following sentence is still ambiguous:

(204) Mariyat-ä ʕarza boy-s [di magazine-y-ā-ɣor-tow
Mariyat-ERG complain-PST.WIT 1SG.ABS(.II) store-OS-IN-VERS-FOC
y-ik'-ān-ƛin].
II-go-FUT.DEF-QUOT

'Mariyat complained that I have to go TO THE STORE.' (IR)
'Mariyat complained that she has to go TO THE STORE.' (SR)

This last example is a reminder that the focus enclitic *–tow* is not found only under indexical shift; it is also regularly deployed in the marking of reflexive or reciprocal readings on regular pronouns or demonstratives (see CH.YY [Binding]) and more generally, in contexts where a normally expected interpretation has to be rejected. Its overall function, in most general terms, can be described as that of indicating that standard expectations in a given context have to be reversed or abandoned.

A standard expectation is that the pronouns in an embedded finite clause will continue pointing to the same referents as their counterparts in the matrix clause. The appearance of *–tow* signals that the relevant pronouns have to be disjoint in reference from the matrix arguments. Put differently, the use of the focus marker blocks the indexical reading, one that can be considered more expected or standard—after all, it was for a reason that many philosophers of language considered indexical shifts monstrous.

The enclitic *–tow* can also appear in contexts like the one illustrated in (205) below. Its addition in such sentences makes coreference with the attitude holder very unlikely or even impossible (judgments vary depending on the lexical verb and on the context). For example:

(205) Irbahin-ä Zarema-q-or [ža-tow neło-ƛ'o-r
Ibrahim-ERG Zarema-POSS-LAT DEM.ABS-FOC DEM.nI-SUPER-LAT
bixzi Ø-oq-si-ƛin] eƛi-s.
angry I-become-PST.WIT-QUOT say-PST.WIT
'Ibrahim$_i$ told Zarema$_k$ that he$_{m/*/??i}$ was angry with her$_{k/n}$.'

Subject expressions are often privileged in maintaining coreference across clauses (see Ariel 1990; Gundel et al. 1993; Miltsakaki 2001; Kehler et al. 2007; van Valin and LaPolla 1997, among others for evidence and discussion), and such coreference in (205) may fall within normal expectations. If so, the use of the focus particle reverses this expectation, hence the unlikely coreference between *Irbahinä* and *ža-tow*. But we also know that clausal constituents other than subjects are less likely to maintain coreference across clause. So if the explanation for (205) is on the right track, we may see a different pattern when *–tow* is added to a lower constituent. Indeed, in (206), where focus appears on the super-lative complement, the judgments regarding coreference between *Zarema* and *nełoƛ'or* are very similar to those for (205).

(206) Irbahin-ä zarema-q-or [ža neło-ƛ'o-r-tow
Ibrahim-ERG Zarema-POSS-LAT DEM.ABS DEM.nI-SUPER-LAT-FOC
bixzi Ø-oq-si-ƛin] eƛi-s.
angry I-become-PST.WIT-QUOT say-PST.WIT
'Ibrahim$_i$ told Zarema$_k$ that he$_{i/m}$ was angry with her$_{k/n}$.'

Generally, judgments on the coreference between noun phrases and demonstratives are more flexible than the corresponding judgments on coreference among pronouns and reference between noun phrases (denoting attitude holders and their addressees) and pronouns.[22]

The use of *–tow* has a categorical effect, completely blocking one of the interpretations, which suggests that it is a properly grammatical mechanism. In addition, various contextual factors can distinguish the two readings, making one of them less plausible or implausible. Agreement is one of such factors. If the predicate of the embedded clause marks agreement, and the speaker and attitude holder (or their respective addressees) differ in gender, gender distinctions help disambiguate between indexical and shifted readings. In (207a), the embedded verb shows gender I agreement. If the speaker of that utterance is a man, the sentence is ambiguous, but if the speaker is a woman, she must use (207b), with gender II agreement (see also (182) above, where agreement also helps in disambiguation).

(207) a. Irbaħin-ä zarema-q-or [di dow-ƛ'o-r
Ibrahim-ERG Zarema-POSS-LAT 1SG.ABS(.I) 2SG-SUPER-LAT
bixzi Ø-oq-si-ƛin] eƛi-s.
angry I-become-PST.WIT-QUOT say-PST.WIT
'Ibrahim told Zarema that I (a man speaking) was angry with you.' (IR)
'Ibrahim$_i$ told Zarema$_k$ that he$_i$ was angry with her$_k$.' (SR)
b. Irbaħin-ä zarema-q-or [di dow-ƛ'o-r
Ibrahim-ERG Zarema-POSS-LAT 1SG.ABS(.II) 2SG-SUPER-LAT
bixzi y-oq-si-ƛin] eƛi-s.
angry II-become-PST.WIT-QUOT say-PST.WIT
'Ibrahim told Zarema that I (a woman speaking) was angry with you.' (IR)
#'Ibrahim$_i$ told Zarema$_k$ that he$_i$ was angry with her$_k$.' (SR)

The disambiguating role of agreement is certainly limited, both by contextual factors (who is speaking and about whom) and by the range of verbs that actually mark agreement.

7 Summary

In this chapter, we have examined monoclausal constructions with restructuring verbs and a variety of clausal complements, namely: infinitival clauses, masdar clauses, nominalized clauses, and finite complement clauses. Despite the differences in their structure and relationship with the matrix verb, all these clauses share some properties; they all have the same case-licensing and agreement characteristics as independent finite clauses, and they are strictly predicate-final (verb-final). Some other of their properties are summarized in the table below.

[22]An alternative to the use of the focus enclitic is the placement of emphatic pitch on the pronoun that undergoes indexical shift. Normally, pronouns are de-accented, so pitch prominence can be perceived as another way of indicating that normal expectations are not met. Pitch is often associated with focus; the fact that it can be used in lieu of *–tow* may follow from this association. However, we have not been able to investigate pitch placement instrumentally, so this observation requires further verification.

Table 2. Basic properties of clausal complements in Tsez

	Embedded predicate	**Complementizer**	**Syntactically transparent**	**Relationship to the matrix verb**	**Notable properties**
Infinitival clause	Infinitive	None	Yes	Control complement Raising complement	Backward control
Masdar clause	Masdar	None	Yes	Control complement	
Nominalized clause	Participle-based nominalization in *–łi*	None	No	Clausal complement	Long-distance agreement
Finite clause	Finite predicate	*-λin*	No	Clausal complement	Indexical shift
Finite clause	Finite predicate	None		Direct quotation	

Relative clauses

Tsez has several types of relative clauses: participial relatives, masdar/infinitival clauses, and free relatives. If a relative clause has an external head noun, that head noun always follows the relative clause (see CH. YY [Noun phrases] for details). For the relative order of relative clauses and other modifiers in the noun phrase, see the chapter on noun phrase structure as well.

1 Participial relative clauses

1.1 Relativization of main clause constituents

Participial relatives are the most common type of relative clause in Tsez. The verb of the relative clause can appear in two participial forms: past participle and present participle. These participles must appear in the final position inside the relative clause. In terms of morphology, the past participle behaves exactly like an adjective, and in particular it does not show case concord based on the case of its head noun. By contrast, the internal structure of the present-participial form corresponds to that of the finite present tense, and is followed by the attributive morpheme *–si*. This morpheme differs depending on the case of the head noun: direct (*-si*) appears when the head noun is absolutive, and oblique (*-zo*) appears when the head noun is in any other form. See CH.YY[MORPH] for the details of participle formation.[1] Compare (1a), (1b), where the form of the participle remains the same regardless of the case in the head noun, versus (2a),(2b), where the participle's ending changes depending on the absolutive/non-absolutive case of the head noun. The difference between the participial forms in (1) and (2) suggests that Tsez participles do not form a coherent class (see Comrie 2002 for further discussion). This conclusion is further underscored by the fact that past participles cannot inflect for mood whereas present participles can; this is clear from the appearance of the latter in the optative (see CH. YY[Predicate phrase]). However, from the standpoint of relative clause formation, the overall behavior of present and past participles is uniform.

(1) a. [el-ä r-ädi-ru] q'ˁuri
1PL-ERG IV-do-PST.PTCP chair.ABS.IV
'the chair that we made'

b. [el-ä r-ädi-ru] q'ˁuri-ƛ'
1PL-ERG IV-do-PST.PTCP chair-SUPER.ESS
'on the chair that we made'

(2) a. [el-ä r-oy-xo-si] q'ˁuri
1PL-ERG IV-do-PRS-ATTR chair.ABS.IV
'the chair that we make/are making'

c. [el-ä r-oy-xo-zo] q'ˁuri-ƛ'
1PL-ERG IV-do-PRS-ATTR.OBL chair-SUPER.ESS
'on the chair that we make/are making'

[1] A more accurate morphemic analysis and gloss for the present participle would be *-xo-si* –PRS-ATTR, as shown in (2). For the purposes of this chapter, however, we will be adopting the participial gloss as a shorthand.

The participial predicate of a relative clause can appear with the definite suffix *–ni*, as shown for the participle *räc'ru* in the following example:

(3) [Yiła-s posu r-äc'-ru]-ni boc'i-n zey-bi-n
DEM.nI-GEN1 cattle.ABS.IV IV-eat.TR-PST.PTCP-DEF wolf.ABS.III-and bear-ABS.PL.nIPL
r-esu-n.
nIPL-see-PST.nWIT
'(She) saw the wolf and the bears that had eaten her cattle.' (Isis rigłi:14)

Tsez also has deverbal adjectives in *–li*, which bear the past tense interpretation. They resemble participles in that they retain the case frame of the verb they are derived from. For instance, the verb *teƛ-* 'give' takes the ergative agent, absolutive patient and lative or possessive recipient. The adjectival participle *teƛali* 'given' has the same case frame:

(4) [nesi žek'-ō teƛ-a-li-ni] heneš
DEM.I person-ERG give-INF-PTCP-DEF apple. ABS.III
'the apple given by that man' (Imnajšvili 1963: 216)

The forms in *–li* are very rare, probably obsolete, and we will not discuss them below.

All the examples presented so far happen to be object relatives. However, Tsez relativization appears to be ubiquitous. All Tsez constituents can be relativized with a participial relative, including some presupposed but unexpressed adjuncts. We illustrate the details of participial relative clause formation with the baseline sentence in (5).

(5) Už-ä kaɣat kid-be-r teƛ-si/teƛ-xo.
boy-ERG letter.ABS.II girl-OS-LAT give-PST.WIT/give-PRS
'The boy gave/gives a letter to the girl.'

(6) *subject relative clause*
[kaɣat kid-be-r tāƛ-ru/teƛ-xosi] užī
letter.ABS.II girl-OS-LAT give-PST.PTCP/give-PRS.PTCP boy.ABS.I
'the boy that gave/gives a letter to the girl'

(7) *object relative clause*
[už-ä kid-be-r tāƛ-ru/teƛ-xosi] kaɣat
boy-ERG girl-OS-LAT give-PST.PTCP/give-PRS.PTCP letter.ABS.II
'the letter that the boy gave/gives to the girl'

(8) *recipient relative clause*
[už-ä kaɣat tāƛ-ru/teƛ-xosi] kid
boy-ERG letter.ABS.II give-PST.PTCP/give-PRS.PTCP girl.ABS.II
'the girl to whom the boy gave/gives the letter'

(9) *temporal adjunct relative clause*
[už-ä kaɣat kid-be-r tāƛ-ru/teƛ-xosi] saʕat
boy-ERG letter.ABS.II girl-OS-LAT give-PST.PTCP/give-PRS.PTCP hour.ABS.III
'the hour at which the boy gave/gives the letter to the girl'

(10) *locative adjunct relative clause*
[už-ä kaɣat kid-be-r tāƛ-ru/teƛ-xosi] otaxi
boy-ERG letter.ABS.II girl-OS-LAT give-PST.PTCP/give-PRS.PTCP room.ABS.IV
'the room where the boy gave/gives the letter to the girl'

The next set of examples shows that it is possible to relativize an instrument:

(11) Už-ä ˁo-no-d ažo y-eč'-si.
boy-ERG axe-OS-INS tree.ABS.II II-cut-PST.WIT
'The boy cut the tree with an axe.'
(12) [už-ä ažo y-āč'-ru] ˁo
boy-ERG tree.ABS.II II-cut-PST.WIT axe.ABS.IV
'the axe that the boy cut the tree with'

Scene-setting expressions in existential clauses such as (13) and genitives of external possession in possessive clauses such as (15) also relativize freely. Compare the following examples:

(13) Nesi-ƛ' q'^{w}ariłi zow-s.
DEM.I-SUPER.ESS sadness.ABS.IV be.PST-PST.WIT
'There was sadness about him.' (lit.: on him)
(14) [nesi-ƛ' zäw-ru] q'^{w}ariłi
DEM.I-SUPER.ESS be.PST-PST.PTCP sadness.ABS.IV
'the sadness that there was about him'
(15) Kid-be-s mesed-yo-s nak'ila yoł.
girl-OS-GEN1 gold-OS-GEN1 little.finger.ABS.III be.PRS
'The girl has a golden little finger.' (lit.: a little finger of gold)
(16) [mesed-yo-s nak'ila yäł-ru]-ni kid
gold-OS-GEN1 little.finger.ABS.III be.PRS-PST.PTCP-DEF girl.ABS.II
'the girl that has a golden little finger' (Allahes ašuni:20)

There is no overt nominal reference to the head noun within the relative clause, and resumptive forms (such as demonstratives) are impossible inside the relative clause. Compare the valid instrumental relative in (12) with its unacceptable counterpart in (17). This comparison confirms that participial relative clauses in Tsez are formed using the gap strategy. The absence of resumption will be important when we compare these relative clauses to some other types below.

(17) *[už-ä neło-d/neło-d-tow ažo y-āč'-ru] ˁo
boy-ERG DEM.nI-INS/DEM.nI-INS-FOC tree.ABS.II II-cut-PST.WIT axe.ABS.IV
('the axe that the boy cut the tree with it')

As examples (6) through (10), (12), (14), (16), and (18) show, all other noun phrases in the relative clause retain the same form they have in a finite clause; based on this observation, we can conclude that there is no change in the relative clause construction depending on the function of the head noun within the relative clause.

The participial predicate agrees with the absolutive noun phrase inside the relative clause, as shown in (1), (2), (3), and (12) above. If the relativized noun phrase is in the absolutive position inside the relative clause, the participle agrees with that head noun, as in example (18a) below, which may create an impression that the participle agrees with the head noun. However, as (18b) shows, the function of the head noun in the matrix clause is irrelevant; the participle only cares about the absolutive inside the relative clause.

(18) a. [už-ä kid-be-qo-r y-egä-ru/y-egir-xosi] kaɣat
boy-ERG girl-OS-POSS-LAT II-send-PST.PTCP/ II-send-PRS.PTCP letter.ABS.II
'the letter that the boy sent/sends to the girl'
b. [už-ä kid-be-qo-r y-egä-ru/y-egir-xosi] kaɣat-yo-ł
boy-ERG girl-OS-POSS-LAT II-send-PST.PTCP/ II-send-PRS.PTCP letter-OS-CONT.ESS
'in the letter that the boy sent/sends to the girl'

Despite the freedom of relativization in Tsez, relativization of the dependent adnominal genitive, in which the head noun functions as possessor, is either rejected by native speakers or considered marginal, as in (20):

(19) a. Uži-s γʷˤay b-oxi-n b-ik'i-s.
boy-GEN1 dog.ABS.III III-run-PFV.CVB III-go-PST.WIT
'The boy's dog has run away.' (lit.: went running)
b. Uži-z γʷˤay-ä di ħan-si.
boy-GEN2 dog-ERG 1SG.ABS bite-PST.WIT
'The boy's dog has bit me.'
(20) a. *[γʷˤay b-oxi-n b-äk'i-ru] uži
dog.ABS.III III-run-PFV.CVB III-go-PST.PTCP boy.ABS.I
('the boy whose dog has run away')
b. ??[γʷˤay-ä di ħän-ru] uži
dog-ERG 1SG.ABS bite-PST.PTCP boy.ABS.I
('the boy whose dog bit me')

We speculate, however, that this is not the result of a specific restriction against relativizing of genitives, but rather the result of pragmatic factors. First, there are nearly always other, more natural ways of constructing such relative clauses. The three main compensatory strategies are as follows: (i) expressing the adnominal genitive as the external possessor and relativizing the external possessor; (ii) using a relative clause where a resumptive demonstrative is co-indexed with the head noun, and (iii) attaching a nominalized relative clause as the genitive modifier of the head noun.

The following example illustrates compensatory strategy (i); the baseline sentence is shown in (21a), and the relative clause, with the external possessor as the head noun, in (21b). External possessors relativize freely, so this strategy allows speakers to circumvent some of the restrictions on the relativization of adnominal possessors.

(21) a. Yedu žek'u-s mec-yo-za-ƛ'-ay-gon r-exora-t'a
DEM person-GEN1 arm-OS-OS.PL-SUPER-ABL-CONTR.TOP nIPL-long-DISTR

kiki-bi yoł.
breast-PL.ABS.nIPL be.PRS
'This man has breasts longer than his arms.'

b. [mec-yo-za-ƛ'-ay-gon r-exora-t'a
arm-OS-OS.PL-SUPER-ABL-CONTR.TOP nIPL-long-DISTR
kiki-bi yoł-äsi] žek'u
breast-PL.ABS.nIPL be-RES.PTCP person.ABS.I
'the man whose breasts are longer than his arms' (Beqes ʕUneyzat:186)

A relative clause with a resumptive demonstrative co-indexed with the head noun (compensatory strategy (ii)) is shown in the pair of examples below:[2]

(22) a. [nesi-s-tow γʷʕay b-oxi-n b-äk'i-ru] užі
DEM.I-GEN1-FOC dog.ABS.III III-run-PFV.CVB III-go-PST.PTCP boy.ABS.I
'the boy$_i$ such that his$_i$ dog has run away'
b. [nesi-z-tow γʷʕay-ä di ħän-ru] užі
DEM.I-GEN2-FOC dog-ERG 1SG.ABS bite-PST.PTCP boy.ABS.I
'the boy$_i$ such that his$_i$ dog bit me'

If a nominalized relative clause appears as the genitive modifier of the head noun (compensatory strategy (iii)), the head noun is also co-indexed with a resumptive demonstrative in the nominalization. Thus:

(23) a. [nesi-s-tow γʷʕay b-oxi-n b-äk'i-ru-łi]-s
DEM.I-GEN1-FOC dog.ABS.III III-run-PFV.CVB III-go-PST.PTCP-NMLZ-GEN1
užі
boy.ABS.I
'the boy whose dog has run away' (lit.: the boy of his dog running away)
b. [nesi-z-tow γʷʕay-ä di ħän-ru-łi]-s užі
DEM.I-GEN2-FOC dog-ERG 1SG.ABS bite-PST.PTCP-NMLZ-GEN1 boy.ABS.I
'the boy whose dog bit me' (lit.: the boy of his own dog biting me)

These compensatory strategies aside, the fact that the relative clause contains no reference to the head noun means that the hearer must use other criteria, such as the argument structure or frame (in the sense of Fillmore 1982) of the verb, in order to reconstruct the relation between the head noun and the rest of the relative clause; since genitives are not part of the argument structure or frame, they cannot be readily retrieved in this way. And, in fact, when the relationship between the relativized possessor and the noun phrase in the relative clause is transparent, as it is in the case of kinship or whole-part relations, the respective relative clause becomes much more acceptable. Compare the next example pairs (see also Comrie and Polinsky 1999):

(24) a. Užі-s babiw Ø-exu-s.
boy-GEN1 father.ABS.I I-die-PST.WIT

[2] We will discuss more examples of this kind at the end of section 1.1.

'The boy's father died.'

b. [babiw Ø-äxu-ru] užі
father.ABS.I I-die-PST.PTCP boy.ABS.I
'the boy whose father died'

(25) a. Kid-be-s xot'o b-oƛ-xo.
girl-OS-GEN1 foot.ABS.III III-hurt-PRS
'The girl's foot hurts.'

b. [xot'o b-oƛ-xosi] kid
foot.ABS.III III-hurt-PRS.PTCP girl.ABS.II
'the girl whose foot hurts'

Tsez does not have possessor raising or external possessor constructions of the type 'the father died on the boy' or 'the foot is hurting the girl', so these constructions cannot be a plausible source for (24b) and (25b).

Relative clauses where the head noun functions as the standard of comparison, as in (26b), are impossible. We hypothesize that this restriction is due to the fact that the standard appears in a particular spatial form; once relativized, it cannot retain this form, and the head noun simply cannot be interpreted in relation to the relative clause:

(26) a. Pat'i Zarema-ƛ'āy q'ˤun-a ł'eb-ā
Fatima.ABS.II Zarema-SUPER-ABL two-OBL year-IN.ESS
y-ˤeže (yoł).
II-old be.PRS
'Fatima is two years older than Zarema.'

b. *[Pat'i q'ˤun-a ł'eb-ā y-ˤeže yäł-ru] kid
Fatima.ABS two-OBL year-IN.ESS II-old be.PST.PTCP girl.ABS.II
('the girl that Fatima is two years older than')

In principle, relativization of the nouns that occur in (one of the many) spatial forms is possible. Consider the following sentence:

(27) Ažo-m-ƛ'o cey b-ič-ix.
tree-OS-SUPER.ESS eagle.ABS.III III-stay-PRS
'A/The eagle is on the tree.'

It is possible to relativize 'tree' in (27) to give (28), but the idea that the eagle is specifically on the tree, rather than *at* or *near* the tree, is lost, because of the failure of Tsez relative clauses to encode explicitly the role of the referent of the head noun in the relative clause:

(28) [cey b-äči-ru] ažo
eagle.ABS.III III-stay-PST.PTCP tree.ABS.II
'the tree where a/the eagle is'

Tsez has another way of encoding the notion of 'on', namely by using the postposition *ƛ'iri* 'above', which combines with a preceding noun in the super-essive case, as in (29):

(29) Ažo-m-ƛ'o ƛ'iri cey b-ič-ix.
tree-OS-SUPER.ESS above eagle.ABS.III III-stay-PRS
'A/The eagle is up on the tree.'

One can form a relative clause as in (30):

(30) [cey ƛ'iri b-äči-ru] ažo
eagle.ABS.III above III-stay-PST.PTCP tree.ABS.II
'the tree up on which a/the eagle is'

At least at first sight, this clause appears to involve relativization of the object of the postposition of (29), together with postposition stranding. However, as we discussed in CH. YY [Adverbial phrase], in addition to its role as a postposition, as in (29), *ƛ'iri* (and likewise other local postpositions) can also function as an adverbial, as in the examples of (31a, b), which illustrate different positions of the adverbial in the clause:

(31) a. ƛ'iri cey b-iči-x.
above eagle.ABS.III III-stay-PST
b. cey ƛ'iri b-iči-x.
eagle.ABS.III above III-stay-PST
'A/The eagle is above.'

This being the case, it is possible to analyze *ƛ'iri* in (30) not as a stranded postposition, but rather as an adverb. The interpretation is thus more akin to 'the tree such that the eagle is above', with the relation between the tree and the adverb established in terms of semantic well-formedness and pragmatic plausibility. Indeed, one might even question whether *ƛ'iri* is a postposition in (29), although our current understanding of the structure of (29) suggests that it is. For instance, it is not possible to put *ƛ'iri* anywhere other than immediately after *ažomƛ'o* and retain the intended meaning, as shown by (32) (compare it with the acceptable (29)):

(32) *ƛ'iri ažo-m-ƛ'o cey b-ič-ix.
above tree-OS-SUPER.ESS eagle.ABS.III III-stay-PST
('A/The eagle is on the tree.')

We have already mentioned the possibility of relative clauses where the head noun, corresponding to an adnominal genitive inside a noun phrase within the relative clause, is represented by a resumptive demonstrative—consider examples (22a,b) above. Such relativization of genitives seems to be quite common, and it is available to different types of genitives, including the genitive of possessor, the whole-part genitive (leg of a chair; below), and the genitive of property (color of paint; below):

(33) [Neło-s-tow ʕoƛ' r-äci-ru] bełay
DEM.nI-GEN1-FOC handle.ABS.IV IV-break-PST.PTCP dagger.ABS.IV
ec'no-si zow-s.
new-ATTR be.PST-PST.WIT

'The dagger whose handle broke was new.'

(34) [Debe-r neło-s-tow ƛ'er b-ät'i-ru] lak
2SG-LAT DEM.nI-GEN1-FOC color.ABS.III III-like-PST.PTCP paint.ABS.III
magazin-y-ā teƛ-xo.
store-OS-IN.ESS give-PRS
'The (wall) paint whose color you like (lit.: that you like its color) is on sale at the store.'

However, genitives in measure phrases (see CH. YY [Noun phrase], section 3.7.3) cannot be relativized even with such resumption. The following relative clause is ungrammatical:

(35) *[di neło-s-tow t'akan y-äsi-ru] ša
1SG.ERG DEM.nI-GEN1-FOC glass.ABS.II II-take-PST.PTCP wine.ABS.III
ceq'iła yoł.
sour be.PRS
('the wine that I bought a glass of is sour')

A similar restriction against the relativization of genitives in measure phrases is observed in Bagwali, although in that language, non-measure genitives relativize without resumption in the relative clause (Kibrik 2001: 498-99).

1.2 Relativization of constituents inside embedded clauses

We have so far discussed the accessibility of main clause constituents to relativization, and we now turn to the relativization of constituents that appear in embedded clausal complements. These are instances where a relative clause includes a clausal complement in which the gap plays a role, as in the English *the movie* [*that Mary believes* [*John likes* __]] or *the city* [*that John decided* [*to visit* ___ *next summer*]].

Relativization of constituents inside infinitival or masdar clauses proceeds in the same way as relativization of main clause constituents. Compare:

(36) a. Boc'-ä [keč' qˢaƛ-a] baybik b-odi-n.
wolf-ERG song.ABS.III shout-INF beginning.ABS.III III-do-PST.nWIT
'The wolf began to sing a song.' (Didur ʕomoyä boc'a k'irik'no:20)
b. [boc'-ä [qˢaƛ-a] baybik b-äy-ru] keč'
wolf-ERG sing-INF beginning.ABS.III III-do-PST.PTCP song.ABS.III
'the song that the wolf began to sing'

(37) a. Dä-r [čiraħ b-it'r-a] šuƛ'i-s.
me-LAT light.ABS.III III-extinguish-INF forget-PST.WIT
'I forgot to turn off (extinguish) the light.'
b. [dä-r [b-it'r-a] šäƛ'i-ru] čiraħ
me-LAT III-extinguish-INF forget-PST.PTCP light.ABS.III
'the light that I forgot to turn off'

(38) a. [Mi-n y-ex-a] zow-s.
2SG.ABS(.II)-and II-die-INF be.PST-PST.WIT
'And you had been meant to die.' (Łux di yik'a yāy?:34)
b. [[y-ex-a] zäw-ru] kid

II-die-INF be.PST-PST.PTCP girl.ABS.II
'the girl that was meant to die'

Likewise, constituents inside nominalized embedded clauses can undergo relativization. For example, (39b) relativizes the object and (39c), the subject of the embedded clause shown in (39a). Such clauses can show long-distance agreement (see CH. YY [Agreement]); in (39), long-distance agreement is shown alternating with properly local agreement. Relativization takes place regardless of the agreement on the embedding verb:

(39) a. [Neł-ä micxir b-ok'ek'-xosi yäł-ru-łi]
DEM.nI-ERG money.ABS.III III-steal-PRS.PTCP be.PRS-PST.PTCP-NMLZ
xan-e-r b-iy-n/r-iy-n
king-OS-LAT III-know-PST.nWIT/IV-know-PST.nWIT
'The king knew that she was stealing the money.'
b. [[neł-ä b-ok'ek'-xosi yäł-ru-łi] xan-e-r
DEM.nI-ERG III-steal-PRS.PTCP be.PRS-PST.PTCP-NMLZ king-OS-LAT
b-äy-ru/r-äy-ru] micxir
III-know-PST.PTCP/IV-know-PST.PTCP money.ABS.III
'the money that the king knew she was stealing'
c. [[micxir b-ok'ek'-xosi yäł-ru-łi] xan-e-r
money.ABS.III III-steal-PRS.PTCP be.PRS-PST.PTCP-NMLZ king-OS-LAT
b-äy-ru/r-äy-ru] ɣˁanabi
III-know-PST.PTCP/IV-know-PST.PTCP woman.ABS.II
'the woman that the king knew was stealing the money'

Examples (39b) and (39c) contrast with the clearly ungrammatical clauses that arise when relativization is attempted on a constituent inside a finite complement clause with the quotative marker *-ƛin*.

(40) a. [Neł-ä micxir b-ok'ek'-xosi yol-ƛin]
DEM.nI-ERG money.ABS.III III-steal-PRS.PTCP be.PRS-QUOT
xan-e-r r-iy-n
king-OS-LAT IV-know-PST.nWIT
'The king knew that she was stealing the money.'
b. *[[neł-ä b-ok'ek'-xosi yol-ƛin] xan-e-r
DEM.nI-ERG III-steal-PRS.PTCP be.PRS-QUOT king-OS-LAT
r-äy-ru] micxir
IV-know-PST.PTCP money.ABS.III
('the money that the king knew she was stealing')
c. *[[micxir b-ok'ek'-xosi yol-ƛin] xan-e-r
money.ABS.III III-steal-PRS.PTCP be.PRS-QUOT king-OS-LAT
r-äy-ru] ɣˁanabi
IV-know-PST.PTCP woman.ABS.II
('the woman that the king knew was stealing the money')

Let us now consider so-called double relativization: the relativization of constituents that appear in relative clauses, as in *the dog that its master that it always waited for died.* In some languages, for instance, in Japanese or Korean, such clauses are acceptable if there is a connection between the events represented in the two relative clauses or if the respective heads are in a kinship or whole-part relationship (Haig 1976, 1996; Na and Huck 1993; Han and Kim 2004). In Tsez, such relativization is impossible even if the relevant contextual conditions are met:

(41) *[[c'aq žäk'-ru] mamalay b-äx-ru] uži
very hit-PST.PTCP rooster.ABS.III III-die-PST.PTCP boy.ABS.I
('the boy that the rooster that he hit very badly died')

(42) *[[hiččа b-äti-ru] kamanda b-äɣu-ru] balešik
most IPL-like-PST.PTCP team.IPL IPL-lose-PST.PTCP fan.ABS.I
('the fan whose team that he likes best lost')

We now turn to what looks like relativization across the boundary of an adverbial clause. In Tsez, nearly all adverbial clauses are non-finite, making use of a rich array of converbs (see CH. YY [Adverbial clauses]).

In some instances, relativizing constituents of adverbial clauses turns out to be perfectly acceptable, as in the case of the object of a conditional clause, shown in (43):

(43) a. Yedu biš^{w}a r-ac'-näy mi untizi Ø-āq.
DEM food.ABS.IV IV-eat.TR-COND.CVB 2SG.ABS(.I) sick I-become.FUT
'If you eat this food, you will get sick.'

b. [[r-ac'-näy] mi untizi Ø-oq-xosi] biš^{w}a
IV-eat.TR-COND.CVB 2SG.ABS(.I) sick I-become-PRS.PTCP food.ABS.IV
'the food that, if you eat it, you'll get sick' (speaking to a man)[3]

Similarly, (44b), which is based on (44a) and includes a temporal clause, is judged acceptable when a context is established of looking for a bush whose blooming is known to be a harbinger of spring:

(44) a. Qaraq-y-ä gagali b-oɣ-nosi ix b-äy.
bush-OS-ERG flower.ABS.III III-pull-ANT.CVB spring.ABS.III III-come.FUT
'When the bush blooms, spring will come.'

b. [[gagali b-oɣ-nosi] ix b-ay-xosi] qaraq
flower.ABS.III III-pull-ANT.CVB spring.ABS.III III-come-PRS.PTCP bush.ABS.II
'the bush that, when it blooms, spring will come'

Such relative clauses, although similar to the other ones we have discussed in this chapter, differ from them in at least one respect: they freely allow the presence of a demonstrative (with or without the enclitic *–tow*) that is coreferential with the head noun. (We have already observed the

[3] Since the verb *untizi* AGR-*oq* shows gender agreement, the gender of the addressee is recoverable.

use of such demonstratives in examples (22) and (23) above, where the demonstrative was coreferential with the noun modified by the relative clause or the adnominal genitive). To illustrate, compare the ungrammatical example in (17) above with the fully grammatical versions of (43b) and (44b) featuring resumptive demonstratives:

(45) [[ža$_i$/ža$_i$-tow r-ac'-näy] mi untizi
DEM.ABS/DEM.ABS-FOC IV-eat.TR-COND.CVB 2SG.ABS(.I) sick
Ø-oq-xosi] biš^{w}a$_i$
I-become-PRS.PTCP food.ABS.IV
'the food that, if you eat *it*, you'll get sick'

(46) [[neł-ä$_i$/neł-ä$_i$-tow gagali b-oɣ-nosi] ix
DEM.nI-ERG/ DEM.nI-ERG-FOC flower.ABS.III III-pull-ANT.CVB spring.ABS.III
b-ay-xosi] qaraq$_i$
III-come-PRS.PTCP bush.ABS.II
'the bush that, when *it* blooms, spring will come'

Not only can the head noun be resumed by a demonstrative, as in these examples, but it can also be coreferential with a noun inside the relative clause. Compare (45) and the following example, where the word *biš^{w}a* is coreferential with the noun phrase *ža zaq'um* 'this poison/biterness'. Note that in this case, the agreement in the embedded conditional clause is no longer gender IV but gender III, as determined by *zaq'um*:

(47) [[ža zaq'um$_i$ b-ac'-näy] mi untizi
DEM poison/bitterness.ABS.III III-eat.TR-COND 2SG.ABS(.I) sick
Ø-oq-xosi] biš^{w}a$_i$
I-become-PRS.PTCP food.ABS.IV
'the food that, if you eat *it*, you'll get sick'

Given these examples, it is likely that the "gap" in embedded adjunct clauses within relative clauses is a null pronoun (which can alternate with overt expressions, as in (45) through (47)). The relationship between the head noun and the gap in the embedded adjunct clause is that of coreference, determined by the plausibility of context. The participial clause gap we discussed earlier in this section does not allow for such an alternation with overt expressions.

1.3 Gapless adposition

Let us now turn to gapless relative clauses (also known as pseudo-relative clauses). In a noun phrase containing such a relative clause, the head noun does not correspond to any gap position inside the relative. Gapless relative clauses are widely attested in Japanese, Korean, and Mandarin. Consider the following example from Japanese:

(48) [sakana-ga yakeru] nioi *Japanese*
fish-NOM burn smell
'the smell of fish burning'

Gapless adpositions are possible but quite rare in Tsez. We have not found gapless relative clauses in narrative texts, but they are accepted in elicitations. For example:

(49) [ša b-ädi-ru] maħ
wine.ABS.III III-do-PST.PTCP smell.ABS.III
'the smell of wine being made'

A preferred way of modifying a head noun, which may call for a gapless relative, is to use an adnominal noun modifier in the genitive case. For instance, (49) can be expressed as (50), where 'making wine' is represented as a nominalization in *-łi*; this nominalization then appears as the adnominal genitive modifying the head noun *maħ*:

(50) [ša b-ädi-ru-łi]-s maħ
wine.ABS.III III-do-PST.PTCP-NMLZ-GEN1 smell.ABS.III
'the smell of wine being made'

The comparison between (49) and (50) bring us to the question of whether or not a participial clause placed before a head noun can receive other interpretations, such as that of a complement clause dependent on the head noun; Matsumoto (1988; 1997) argues for precisely such a syntactic identity between relative clauses and nominal-headed complement clauses in the case of Japanese. In Tsez, however, these two types of clauses have different properties. For complement clauses selected by such nouns as 'news', 'rumor', 'fact', etc., see Ch. YY [Noun phrase].

1.4 Participial relative clauses with a null head

The examples presented so far all show participial relative clauses with an overt external head. However, relative clauses without such an overt head are also possible. When a relative clause occurs without an overt head, it typically features the definite attributive marker *–ni*; the past participle can also optionally take the attributive suffix *–si*, as shown in (51) below. Compare example (7) above and its null-headed counterparts, shown below in the absolutive and postpositional forms. Such relative clauses always have a definite interpretation:

(51) [už-ä kid-be-r teλ-ru(-si)-ni]
boy-ERG girl-OS-LAT give-PST.PTCP-ATTR-DEF
'the thing that the boy gave to the girl'

(52) [už-ä kid-be-r teλ-xo-zo]-z meča
boy-ERG girl-OS-LAT give-PRS-ATTR.OBL-GEN2 instead
'instead of the thing that the boy gives to the girl'

Headless relative clauses with the past participle in *–zo-* are often used to express spatial relations, and in that function they appear in various spatial forms (see Ch. YY [Adverbial phrase] for details).

Headless participial relative clauses are also used in comparative correlatives of the type illustrated by the English *the more the merrier.* In such comparative correlatives, the relative clause always appears with the equative suffix *–ce,* and the parallel clause is expressed by a regular finite construction. In the following examples, we show the relative clauses in brackets:

(53) [Eli b-ˢeže b-äq-ru]-*(ce) r-aqˢu
1PL.ABS.IPL IPL-big IPL-become-PST.PTCP-EQUAT IV-many/much
šebin r-äy elu-r.
thing.ABS.IV IV-come.FUT.DEF 1PL-LAT
'The older we get, the more we know.' (lit.: the bigger we become, the more things will come to us)

(54) [Harihun ža Ø-eynäy-ru]-*(ce) babiw
slowly DEM.ABS(.I) I-work-PST.PTCP-EQUAT father.ABS.I
nesi-qo-r Ø-aqˢu Ø-aƛ'i-x.
DEM.I-POSS-LAT I-many/much I-be.angry-PRS
'The slower he works, the more father chides him.'

(55) [ɣudi r-äk'i-ru]-*(ce) nesi-s tatu
day.abs.iv iv-go- PST.PTCP-EQUAT DEM.I-GEN strength.ABS.III
b-exu-x b-ik'i-x zow-n.
III-die-IPFV.CVB III-go-IPFV.CVB AUX.PST-PST.nWIT
'The more time passed, the less strength he had.' (lit: day going, his strength went dying) (Łˢono esiw:3)

(56) [Žedu b-et'u-k'äƛi-ru]-*(ce) q'ˢano-n
DEM.PL.ABS.IPL IPL-jump-run-PST.PTCP-EQUAT two-and
esna-bi b-eži-gon teł-xo-r šiši-x
sibling-ABS.PL(.IPL) IPL-big-CONTR.TOP inside-AD-LAT be.stuck-IPFV.CVB
b-ik'i-x zow-n.
IPL-go-IPFV.CVB AUX.PST-PST.nWIT
'The more they kept jumping, the more the two brothers got stuck.' (Q'ˢano guluči sis aqiw esnabi:13)

Comparative correlatives are not the only correlative constructions found in Tsez; the other types, which are formed somewhat differently, will be discussed in Section 3.

2 Masdar and infinitival relative clauses

2.1 Masdar and infinitival clauses: Relative vs. purpose clauses

Relative infinitive clauses, as non-finite modifiers of nouns, are quite common. In English, they can be illustrated by sentences such as:

(57) a. This is [a hard nut [to crack]].
b. Here is [the table [to put the lamp on]].
c. Here's [a new neighbor [for mom to bicker with]].

In the noun phrase *the table* [*to put the lamp on*]], the infinitive clause corresponds to the finite clause *on which one could/should/will put the lamp.* Such relative clauses have attracted the attention of many researchers (e.g., Berman 1974a, b; Bolinger 1988; Faraci 1974; Fleischer 2008; Green 1973; 1992; Geisler 1995, among others). The details of infinitival relatives in English and other familiar languages tend to be quite complex, but in general, such clauses often have a modal reading (*a table on which one could put the lamp*) and also a purposive reading. The latter use often makes infinitival relative clauses hard to distinguish from purpose adjunct

clauses expressed by infinitives (see Simonin 2011 for a detailed discussion). When an infinitival clause is used to denote purpose, it does not syntactically form a unit with the head noun and therefore does not depend on the head noun for placement or identification. There are quite a few diagnostics that distinguish the two uses of infinitival clauses, which we discuss below.

Tsez infinitival and masdar relative clauses always express a property that can be understood as *available for potential use*. For example, in (58), we find a description of some general ability that could be used in order to lift the main character of a fairy tale into a higher world. In (59), there is an implication of "any set of things that can be done," while (60) bears an implication of "any set of places to which one could escape":

(58) [mi elo ƛ'iri-r Ø-izi-r-ani-x]
2SG.ABS.(I) there above-LAT I-rise-CAUS-MASD-AD.ESS
res-no maħal-no
possibility.ABS.III-and might.ABS.III-and
'ability and might to lift you up there.' (ʕAliqilič:113)

(59) [r-od-a-r-is-a] šebin
IV-make-INF-IV-take-INF thing.ABS.IV
'things to do' (Eniwn kidno:1)

(60) [Mi ži da-q-äy Ø-ok'ł-a] moči ānu.
2SG.ABS(.I) now 1SG-POSS-ABL I-run.away-INF place.ABS.III be.PRS.NEG
'Now there is no place for you to run away from me.' (K'eneč':39)

Infinitival and masdar relative clauses modify nouns denoting something that is generally necessary in order for a potential event to take place. Because of the general potential interpretation, such noun phrases often occur with intensional predicates ('look for', 'know') and in questions or statements concerning the availability of an item. For example,

(61) [At' q'uq'-ani-r] łi r-oq-inč'i.
dough.ABS.IV knead-MASD-LAT water.ABS.IV IV-become-PST.WIT.NEG
'There was no water to knead the dough.' (ʕAliqilič:43)

(62) Učitel-ä [xex-z-ar r-ukad-ani-x] kino
teacher-ERG child-OS-LAT IV-see-MASD-AD.ESS movie.ABS.IV
k'edi-x.
look.for-PRS
'The teacher is looking for a movie for the children to see.'

(63) [Gulu-ƛ' zow-ani-x] bažari yoł-ä debi?
horse-SUPER.ESS climb-MASD-AD.ESS skill.ABS.III be.PRS-INTERR 2SG.GEN1
'Do you know how to ride a horse?' (lit.: do you have the skill for climbing on a horse?)

(64) [R-ac'-a] šebi-n yoł-ä debe-q?
IV-eat.TR-INF thing.ABS.IV be.PRS-INTERR 2SG-POSS.ESS
'Do you have something to eat?'

In infinitival and masdar relatives, the subject (or the highest argument, to be more precise) can be mentioned inside the relative clause, just as in English (57c). Unlike English, arguments in Tsez masdars and infinitives have the same case marking as in finite clauses, so the case on the subject of a relative clause can be ergative, lative, absolutive, or possessive; for instance:

(65) [kid-b-ä nełā neła-z tuple-za-ƛ teƛ-ani-x] micxir
girl-OS-ERG REFL.nI-GEN1 shoe-OS.PL-SUB.ESS pay-MASD-AD.ESS money.ABS.III
'(the) money for the girl to pay for her shoes'

(66) [ɣˤana-za-r taʕam b-iy-ani-x] čorpa
woman-OS.PL-LAT taste.ABS.III III-know-MASD-AD.ESS soup.ABS.IV
'soup for the women to taste'

(67) [gulu b-et'u-n k'oƛ-a] huni
horse.ABS.III III-tear.away-PFV.CVB run-INF road.ABS.IV
'the/a road for a/the horse to gallop on'

(68) [debe-q qiqi łek'ir-eł-ani-r] k'oši
2SG-POSS.ESS gruel.ABS.IV stir-POT-MASD-LAT wooden.spoon.ABS.IV
'a wooden spoon so that you could stir gruel'

The pragmatic and semantic factors that determine the choice between an infinitive and masdar seem quite nuanced. In general, masdar relative clauses are more common in texts, but speakers readily replace them with infinitival relatives and do not perceive a significant meaning change. Likewise, if a masdar clause is used, the masdar predicate can appear either in the lative or in the adessive without creating a discernible meaning difference.

As in English, it may not be immediately obvious how to draw the line between the use of an infinitival/masdar clause as a relative clause and its use as a purpose clause. For instance, in the following example, the masdar clause *ša bodanix* 'to make wine' can denote either the property of the grapes (grapes intended for wine-making) or the purpose of pressing those grapes:

(69) Di [ša b-od-ani-x] k'udi q'uq'i-ƛ'orey
1SG wine.ABS.III III-do-MASD-LAT grapes.ABS.III press-DUR.I.CVB
'While I was pressing grapes to make wine…' (Xanno, nesisgon łˤono užin: 81)

It is impossible to avoid ambiguity in all cases, but several properties differentiate genuine purpose clauses (containing an infinitival or masdar predicate) from their corresponding relative clauses. First, recall that all noun phrases in Tsez are head-final, so the relative clause cannot follow the head noun, whereas a purpose clause, which does not depend structurally on a noun phrase, can follow it. In the next example, the masdar clause follows the noun phrase *hič'č'a riguni šeƛ'un gulun*, so it is clearly a purpose clause. Likewise, in (71), the masdar clause with the predicate *riyanix* follows the possible head noun (*zaman*), thus appearing as a purpose, not relative, clause:

(70) Xan-ä hič'č'a r-igu-ni šeƛ'u-n gulu-n
king-ERG most nIPL-good-DEF clothes.ABS.IV-and horse.ABS.III-and
[nesi-r r-iž-ani-x] ziru-qo-r teƛ-no.
DEM.I-LAT nIPL-carry-MASD-AD.ESS fox-POSS-LAT give-PST.nWIT
'The king gave the best clothes and horse to the fox so that it would bring them to him.' (Goqin zirun:25)

(71) Debe-r zaman b-ay-n [[nā-r [t'et'r-a]
2SG-LAT time.ABS.III III-come-PST.nWIT where-LAT study-INF

Ø-ik'i-xosi yäł-ru-łi] r-iy-ani-x].
I-go-PRS.PTCP be.PRS-PST.PTCP-NMLZ IV-know-MASD-AD.ESS
'It is time for you to decide (lit.: know) where to go to study.'

Purpose clauses can appear without any head noun, whereas the omission of a head noun with relative clauses of this type is impossible:[4]

(72) [unto-de dandir ħaƛ-ani-x/ħaƛ-ani-r]
sickness-APUD.ESS against drink-MASD-AD.ESS/drink-MASD-LAT
*(daru)
medicine.ABS.III
'medicine to take against illness'

A purpose clause can be embedded under another purpose clause, whereas double relativization is impossible with masdar or infinitival relative clauses. Compare the following examples. In (73), the infinitival clause *Goqi owa* takes an embedded masdar clause (*xanqo ukaranix*). In (74), the noun *łi* 'water' is modified by a masdar clause *ħaƛanix* 'to drink', but the masdar clause embedded under it can only be interpreted as a purpose clause.

(73) Ziru k'oƛi-n b-ik'i-n [[xan-qo
fox.ABS.III run-PFV.CVB III-go-PST.nWIT king-POSS.ESS
Ø-uka-r-ani-x] Goqi Ø-ow-a].
I-see-CAUS-MASD-AD.ESS Goqi.ABS.I I-bring-INF
'The fox went running to get (bring) Goqi to show him to the king.' (Goqin zirun:13)

(74) Nes-ä esir-no yił-q-ay [ħaƛ-ani-x
DEM.I-ERG ask-PST.nWIT DEM.nI-POSS-ABL drink-MASD-AD.ESS
[ħal b-ˢaq'iƛ-ani-x]] łi.
strength.ABS.III III-increase-MASD-AD.ESS water.ABS.IV
'He asked her for water to drink so that he could increase his strength.'

The infinitival or masdar predicate in a purpose clause can optionally appear with the quotative marker *–ƛin,* as shown below.[5] But such marking is impossible in infinitival and masdar relative clauses. Thus, the two uses of infinitival/masdar relative clauses form a minimal pair:

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[4] Masdar (but not infinitival) relative clauses can be nominalized with the abstract suffix *–łi*, but such nominalizations, while technically grammatical, are dispreferred:

(i) a. [unto-de dandir ħaƛ-ani-x]-łi
sickness-APUD.ESS against drink-MASD-AD.ESS-NMLZ
'(something) to take against illness'
b. *[unto-de dandir ħaƛ-a]-łi
sickness-APUD.ESS against drink-INF-NMLZ

If the entire complex noun phrase with an infinitival or masdar relative has to refer to an unspecified or generic entity, it occurs with the head noun *šebin* 'thing' or *žek'u* 'person'.

(75) Nes-ä daru b-is-si [unto-de dandir
DEM.I-ERG medicine.ABS.III III-take-PST.WIT sickness-APUD.ESS against
ħaƛ-ani-x-(ƛin)].
drink-MASD-AD.ESS-QUOT
'He bought a medication to take against sickness.'

(76) Nesi-r [unto-de dandir ħaƛ-ani-x-(*ƛin)]
DEM.I-LAT sickness-APUD.ESS against drink-MASD-AD.ESS-QUOT
daru b-eti-x.
medicine.ABS.III III-want-PRS
'He wants a medication to take against sickness.'

Finally, purpose clauses depend on the main predicate for their interpretation, and relative clauses depend on the head noun. In several examples above, a head noun modified by a masdar/infinitival relative clause appeared with such verbs as 'be' or 'become', which do not combine with purpose clauses.

2.2 The highest argument/subject restriction

Infinitival and masdar relative clauses allow for the relativization of all constituents except the highest argument of the relative clause. We will first list some typical examples of relative clauses. For instance, "ditransitive transitives", discussed in CH. YY [Basic clause types], freely allow relativization on both of their objects, in the absolutive and in an oblique case:

(77) [ged-mo-ƛ' r-iħ-ani-x] ito
clothes-OS-SUPER.ESS IV-put-MASD-AD.ESS iron.ABS.IV
'the/an iron to iron clothes'

(78) [ito r-iħ-ani-x] ƛ'iriku-bi
iron IV-put-MASD-AD.ESS kerchief-OS-PL.ABS.nIPL
'kerchiefs to iron'

(79) [ok'o-bi r-ok'a-ani-r] k^{w}art'a
nail-ABS.PL IV-hit-MASD-LAT hammer.ABS.IV
'a/the hammer to hammer in nails'

(80) [k^{w}art'a r-ok'a-ani-r] ok'o-bi
hammer.ABS.IV IV-hit-MASD-LAT nail-PL.ABS.nIPL
'nails to hammer in'

Example (81) shows relativization on an instrument/medium:

(81) [awtobus-a-ƛ'-no poezd-a-ƛ'-no b-ik'-ani-x]
bus-OS-SUPER.ESS-and train-OS-SUPER.ESS-and IPL-go-MASD-AD.ESS
belet
ticket.ABS.II
'ticket to go on bus and train'

[5] Control complement clauses can also appear with -*ƛin*, as discussed in CH. YY[COMPL CL].

Examples (82) through (84) show relativization on various locative expressions:

(82) [kec-ani-x] diwan
sleep- MASD-AD.ESS couch.ABS.IV
'a/the couch to sleep on'

(83) [ʕimru b-od-ani-r] ɣˢutku
life.ABS.III III-do-MASD-LAT house.ABS.IV
'a house to live in'

(84) [magalu b-is-ani-x] magazin
bread.ABS.III III-take-MASD-AD.ESS store.ABS.IV
'a/the store to buy bread at'

While the relativization of adjuncts is possible, relativization of subjects is not. The noun phrase below can be interpreted only as "the horse for someone on which to gallop on the road" (since the verb shows agreement, the understood subject could be either an animal, belonging to gender III, or a group of people whose denotation belongs to IPL); the intended interpretation in (85), where the subject is relativized, is impossible:

(85) *[huni-ƛ' b-et'u-n k'oƛ-a] gulu
road-SUPER.ESS III-tear.away-PFV.CVB run-INF horse.ABS.III
('the/a horse to gallop on on the road')

Likewise, the following noun phrase with an intransitive masdar clause can only be interpreted as indicating the doctor to talk to, not the doctor who would do the talking. In (86a), there is no ambiguity, because the second-person singular *mi* can only be absolutive or ergative, and its absolutive status clearly qualifies it as the subject of the masdar. In (86b), the literal meaning is "your doctor to talk to," and in principle, an interpretation is possible in which the doctor is somehow connected to the addressee of the utterance and will do the talking. With a masdar relative, on the other hand, this interpretation is completely ruled out:

(86) a. [mi xabary-ani-x] doxtur
2SG talk-MASD-AD.ESS doctor.ABS.I
'the/a doctor for you to talk to'

b. [xabary-ani-x] debi doxtur
talk-MASD-AD.ESS 2SG.GEN1 doctor.ABS.I
'the/a doctor for you to talk to'
'your doctor for someone to talk to'
NOT: 'your doctor who will talk'

In transitive and ditransitive clauses with a masdar/infinitival predicate, the ergative cannot be relativized:

(87) [c'alduqan-z-ä žawab teƛ-ani-x] sual-ya-bi
student-OS.PL-ERG answer.ABS.III give-MASD-AD.ESS question-OS-PL.ABS.nIPL
'questions for (the) students to answer'

(88) *[sual-yo-s žawab teƛ-ani-x] c'alduqan-bi

question-OS-GEN1 answer.ABS.III give-MASD-AD.ESS student-PL.ABS.IPL
('(the) students to answer a/the question')

In the affective construction (see CH. YY [Basic clause types]), we find two separate patterns. Those verbs that causativize into transitives ('know', 'hear') permit only relativization of the absolutive argument. Thus, their lative arguments behave as subjects with respect to relativization. Compare example (66) above and the ungrammatical (89):

(89) *[Čorpa-s taʕam b-iy-ani-x] ɣʕana-bi
soup-GEN taste.ABS.III III-know-MASD-AD.ESS women-ABS.PL.nI
ān-ä?
be.PRS.NEG-INTERR
('Aren't there any women to taste soup?')

Those verbs of cognition and perception that form ditransitive causatives (e.g., 'see', 'like, want') allow for relativization of both noun phrases in the affective construction. Compare the following examples:

(90) Učitel-ä [xex-za-r r-ukad-ani-x] kino k'edi-x.
teacher-ERG child-OS.PL-LAT IV-see-MASD-AD.ESS movie.ABS.IV look.for-PRS
'The teacher is looking for a movie for the children to see.'
(91) Žed-ä [yedu ħalt'i b-eta-ani-x] žek'u-bi
DEM.I.PL-RG DEM work.ABS.III III-want-MASD-AD.ESS person-ABS.PL.IPL
žin k'edi-x.
still look.for-PRS
'They are still was looking for people who would want this work.' (lit.: to want this work)

The verbs that appear in the accidental construction are structurally identical to masdars and infinitives, but their semantics is probably incompatible with the purposive/goal-oriented reading of masdar clauses, and speakers reject such readings in general, regardless of the constituent that is relativized. In the potential construction with the predicate in the potential or optative form, the poss-essive agent cannot be relativized with a masdar, but all other constituents can:

(92) K'et'u-q besuro b-ac'a-ł-xo.
cat-POSS.ESS fish.ABS.III III-eat-POT-PRS
'The cat could eat (the) fish.'
(93) a. [k'et'u-q b-ac'a-ł-ani-x] besuro
cat-POSS.ESS III-eat-POT-MASD-AD.ESS fish.ABS.III
'fish for the cat to eat'
b. [k'et'u-q besuro b-ac'a-ł-ani-x] k'ot'i
cat-POSS.ESS fish.ABS.III III-eat-POT-MASD-AD.ESS small.plate.ABS.III
'a plate for the cat to eat fish on/from'
c. *[besuro b-ac'a-ł-ani-x] k'et'u
fish.ABS.III III-eat-POT-MASD-AD.ESS cat.ABS.III
('the/a cat able to eat fish')

In existential and possessive clauses, the pivot (possessum) can be relativized, but the scene-setting expression and the possessor noun phrase cannot. Compare:

(94) Yiła kid-be-s kidila yoł.
DEM girl-OS-GEN1 doll.ABS.II be.PRS
'That girl has a doll.'

(95) a. [yiła kid-be-s yoł-ani-r] kidila
DEM girl-OS-GEN1 be.PRS-MASD-LAT doll.ABS.II
'a doll for that girl to have'

b. *[kidila yoł-ani-r] kid
doll.ABS.II be.PRS-MASD-LAT girl.ABS.II
('a girl to own a doll')

Since relative clauses with infinitival or masdar predicates are often hard to distinguish from purpose clauses with the same predicate, one may even get an impression that subject relativization is possible; consider, for example, the sentence below, which may at first glance be interpreted as something like, "The people destined to look for money came":

(96) [Micxir k'ed-ani-x] žek'u-bi b-ay-s.
money.ABS.III look.for-MASD-AD.ESS person-PL.ABS.IPL IPL-come-PST.WIT
'People came here to look for money.'

However, the masdar clause in this sentence can be separated from its apparent head noun, which indicates that it is a purpose clause:

(97) Žek'u-bi b-ay-s [micxir k'ed-ani-x].
person-PL.ABS.IPL IPL-come-PST.WIT money.ABS.III look.for-MASD-AD.ESS
'People came here to look for money.'

And if the semantics of the matrix predicate is such that it does not combine with a purpose clause, then the masdar becomes impossible:

(98) *Dä-r [micxir k'ed-ani-x] žek'u-bi
1SG-LAT money.ABS.III look.for-MASD-AD.ESS person-PL.ABS.IPL
b-ukay-s.
IPL-see-PST.WIT
("I saw the people to look for money.")

2.3 Comparison between participial and infinitival/masdar relatives

The main difference between participial relatives and relative clauses with a masdar or infinitive has to do with modality. Infinitival/masdar relative clauses express some general property of the head noun, which could potentially be put to use by the agent. Such an agent is either presupposed, as for instance, in (61), or overtly mentioned in the relative clause, as in (86) or (87).

Structurally, we already showed that infinitival/masdar relative clauses cannot relativize the subject or the highest structural argument. No such restriction is found in participial relative clauses.

Infinitival/masdar relative clauses can include a reflexive whose antecedent is in the matrix clause. For example:

(99) [Nełä neła-s ac y-aˢɣ-ani-x] ħal ānu
REFL.nI-GEN1 door.ABS.II II-open-MASD-AD.ESS ability.ABS.III be.PRS.NEG
dä-z ečuy-s.
1SG-GEN2 grandmother-GEN1
'My grandmother$_i$ cannot even open her$_i$ door.'

On the other hand, a reflexive inside a participial relative clause cannot be bound by an external antecedent:

(100) *Kid-b-ä tungi [nełä neł-ä teł zäw-ru]-zo
girl-OS-ERG jug.ABS.III DEM.nI-IN.ESS-FOC inside be.PST-PST.PTCP-ATTR.OBL
łi-d esay-s.
water-INS wash-PST.WIT
('The girl washed the jug with the water that was in itself.')

Participial relative clauses in which the head noun is the nominal component of a complex verb are well formed; in contrast, infinitival/masdar clauses with nouns embedded in complex verbs are impossible. Observe the following contrast:[6]

(101) a. [ʕal-ä irbahin-e-r b-ädi-ru] kumak
Ali-ERG Ibrahim-OS-LAT III-do-PST.PTCP help.ABS.III
'Ali's help to Ibrahim' (lit: the help that Ali did for Ibrahim)
b. *[ʕal-ä irbahin-e-r b-od-ani-x] kumak
Ali-ERG Ibrahim-OS-LAT III-do-MASD-AD.ESS help.ABS.III
(102) a. [ʕal-ä er-xosi] kul
Ali-ERG put-PRS.PTCP hope.ABS.III
'the hope that Ali has' (lit.: puts)
b. *[ʕal-ä er-ani-r] kul
Ali-ERG put-MASD-LAT hope.ABS.III

2.4 Modal existential relatives with the infinitival or masdar predicate

Infinitival and masdar clauses can form existential relative clauses, which appear without an external head. Such clauses have the general structure shown below:

(103) [Wh-expression Verb-INF/Verb-MASD]

[6] In the complex verb *kumak bod-* 'help', the light verb agrees with the absolutive *kumak* in gender III.

These relative clauses fit the profile of so-called modal existential constructions (see Šimik 2013 for an overview and discussion); such constructions are typically associated with stative verbs, most often the existential (although some other verbs can also be used, as we show below).

To illustrate, let us first consider such clauses occurring in the pivot position in a construction that is close in meaning to the existential construction 'there is/are + NP' (e.g., *There's something to eat*) or to the possessive construction (e.g., *Ali has a place to go*). For example:

(104) a. Howt'a [nā-r Ø-ik'-a] ānu.
there where-LAT I-go-INF be.PRS.NEG

b. [Nā-r Ø-ik'-a] ānu howt'a .
where-LAT I-go-INF be.PRS.NEG there
'There is nowhere to go from there.' (lit.: there is not where to go)

c. *Ø-ik'-a howt'a nā-r ānu.
I-go-INF there where-LAT be.PRS.NEG

(105) a. Kid-be-q [šebi es-ani-x] zow-n-ānu.
girl-OS-POSS.ESS what.ABS.IV tell-MASD-AD.ESS be.PST-PST.nWIT-NEG

b. [Šebi es-ani-x] zow-n-ānu kid-be-q.
what.ABS.IV tell-MASD-AD.ESS be.PST-PST.nWIT-NEG girl-OS-POSS.ESS
'The girl had nothing to say.' (lit.: there was no what to say…)

c. *Kid-be-q šebi zow-n-ānu es-ani-x.
girl-OS-POSS.ESS what.ABS.IV be.PST-PST.nWIT-NEG tell-MASD-AD.ESS

In (104) and (105), the respective infinitival and masdar clauses appear without an external head and have the interpretation typical of a modal existential relative (cf. Grosu 1994, 2004; Caponigro 2003; Šimik 2013). As the examples above show, these modal existential relatives serve as the pivot of the existential or possessive clause. The next example shows that the wh-word has to appear as the first constituent of such relative clauses; this characteristic differentiates this subtype of relatives from other types (including other infinitival and masdar clauses), where the word order before the predicate is generally free:

(106) a. Nesi-q [neti ʕal-ā-r Ø-ik'-a] ānu.
DEM.I-POSS.ESS when village-IN-LAT I-go-INF be.PRS.NEG
'He does not have the time to go to the village.' (lit.: when to go to the village)

b. ??/*Nesi-q [ʕal-ā-r neti Ø-ik'-a] ānu.
DEM.I-POSS.ESS village-IN-LAT when I-go-INF be.PRS.NEG

Modal existential relatives are most common in existential or possessive clauses, but they can occur with other predicates as well. Mostly these are intensional predicates such as 'look for', 'believe', 'need', or 'want'. For example:

(107) Nes-ä [łu-q xabary-ani-x] k'edi-x.
DEM.I-ERG who-POSS.ESS talk-MASD-AD.ESS look.for-PRS
'He is looking for someone to talk to.'

(108) Neła-r [nā xaltizi y-oq-a] y-eti-xosi zow-s.
DEM.nI-ERG where work II-become-INF II-want-PRS.PTCP be.PST-PST.WIT
'She needed a place to work.' (lit.: where to work)

With the exception of ‘why’, and ‘how’, all wh-words can occur in such existential relatives. In addition, since infinitival and masdar relatives have a subject restriction (see 2.2 above), a wh-word in the subject position of such relative clauses is impossible. Finally, modal existential relatives with complex wh-words are rejected (although it is unclear whether they are ungrammatical or merely infelicitous). Thus:[7]

(109) #Nes-ä [nāzo doxtur-qo xabary-ani-x] k’edi-x.
DEM.I-ERG which.OBL doctor-POSS.ESS talk-MASD-AD.ESS look.for-PRS
(lit.: “He is looking for which doctor to talk to.”)

Modal existential relative clauses cannot appear with a head noun; compare the headless relative in (107) and its ungrammatical externally headed counterpart below:

(110) *Nes-ä [łu-q xabary-ani-x] žek’u-bi k’edi-x.
DEM.I-ERG who-POSS.ESS talk-MASD-AD.ESS person-PL.ABS.IPL look.for-PRS
(‘He is looking for people to talk to.’)

If an infinitival/masdar relative clause does not include a wh-word, then it can appear with an external head. This means that it is possible to construct a minimal pair of existentially interpreted infinitival/masdar relative clauses, as schematized below:

(111) [Wh-expression Verb-INF/Verb-MASD] *Head Noun

(112) [… Verb-INF/Verb-MASD] Head Noun

The option in (112), with semantically light heads such as ‘person’, ‘thing’, ‘time’, ‘place’, etc., is a common alternative to the headless type in (111). Compare the headless relative in (105) to the existentially interpreted headed relative clause below, whose head noun is *šebin* ‘thing’. Note that the order of the masdar and the head noun cannot be reversed:

(113) a. Kid-be-q [es-ani-x] šebin
girl-OS-POSS.ESS tell-MASD-AD.ESS thing.ABS.IV
r-iq-n-ānu.
IV-be.had-PST.nWIT-NEG
‘The girl had nothing to say.’ (lit.: thing for saying)
b. *Kid-be-q šebin [es-ani-x]
girl-OS-POSS.ESS thing.ABS.IV tell-MASD-AD.ESS
r-iq-n-ānu.
IV-be.had-PST.nWIT-NEG

Interpretive differences between existential headless relatives and existential relatives with a semantically light external head such as (113) are very subtle. Generally, speakers use these two types of relatives interchangeably in elicitations and spontaneous discourse. However, the

[7] This contrasts with the grammaticality of free relatives with complex wh-words (see section 4 below).

difference becomes more apparent if we contrast a genuine existential relative and a relative clause with an indefinite in the head noun position. Compare the following two sentences:

(114)	a.	Dey	[nā-r	Ø-ik'-a]	ānu.	
		1SG.GEN1	where-LAT	I-go-INF	be.PRS.NEG	
		'I don't have where to go (man speaking).'				
	b.	Dey	[nā-r	Ø-ik'-a]	moči-kin	ānu.
		1SG.GEN1	where-LAT	I-go-INF	place.ABS.III-FOC	be.PRS.NEG
		'I don't have anywhere to go.'				

The only way to express the exhaustive reading is by using a headed relative clause, as in (114b).

3 Definite free relative clauses and correlative clauses

3.1 General remarks

Free relative clauses with a definite interpretation (as opposed to the existential interpretation discussed in section 2.4, and *ever*-free relatives, which we will address below) can be illustrated by the following English examples, where the free relative is shown in brackets. Crucially, the free relative appears in an argument and adjunct position, have the category of the wh-word, and can alternate with regular noun phrases—for instance, *what Fred offered to her* can be replaced by *it* or *his gift* (see Bresnan and Grimshaw 1978 for a discussion):

(115) a. [What Fred offered to her] went into the trash. (Baker 1995: 206)
b. I did not see [whoever you saw].
c. They will be [however tall their father is].

In addition to such free relatives we also find correlatives. In a correlative construction, the correlative clause is an adjunct to the main clause, and both clauses include explicit reference to the notional head. The following English example illustrates the pattern. The headless relative clause *whatever proposal he made* corresponds to the proform *it* in the main clause. In contrast to free relatives, correlative clauses do not replace arguments; the proform corresponding to a correlative clause appears in the argument position, as in (116); if a proform is impossible in a certain position, the correlative construction is impossible, as shown by (117).

(116) [Whatever proposal he made] she rejected *it*.
CORRELATIVE CLAUSE

(117) *[However tall their father is] she will be *it*.
CORRELATIVE CLAUSE

Hindi correlatives are among the most commonly cited instances of this construction (cf. Dayal 1996). For example, in (118), the bracketed material is a correlative clause, and *vo* is the proform corresponding to that clause in the main clause of the correlative construction:

(118)	[Jo	laRkii	khaRii	hai]	vo	lambii	hai.
	rel	gril	standing	is	that	tall	is

'The girl who is standing is tall.' (lit.: which girl is standing, she is tall)

3.2 Tsez free relatives/correlatives: Structure

Tsez has a clausal form which is superficially ambiguous between free relatives and correlatives. It is a clause that is formally identical to a wh-question; it includes a wh-word and an interrogative predicate. As some examples below show, the wh-expression does not have to appear at the left edge and can be placed anywhere in the preverbal domain inside the relative clause. This makes this type different from the modal existential relative clauses discussed in section 2.4 above; in those clauses, the wh-expression has to be clause-initial.

The homophony with the interrogative form is not accidental. In many languages with free relative clauses, one can make the claim that they have a structure partially similar to that of wh-questions, although it is clear that the two structures are not identical. Indeed, in English, one finds a difference between the root wh-question *Whoever did you see?*, with obligatory subject–auxiliary inversion, and the relative clause *whoever you saw*, without inversion (see Baker 1995: Ch. 7 for an extensive discussion). In Tsez, however, the two constructions are formally identical. In most tense–aspect–mood formations, Tsez uses the same verb form in an interrogative as in a declarative sentence, so the identity of free relatives and interrogatives is obscured. In the past witnessed tense, however, there is a distinction: declarative sentences have the suffix *-s(i)*, whereas interrogative sentences have the suffix *-ä*, as illustrated in the following example:

(119) Nāsi užī hič'č'a adāz Ø-ay-ä/*Ø-ay-si?
which boy.ABS.I most first I-come-PST.WIT.INTERR/I-come-PST.WIT
'Which boy came first?'

Even though the relative clause does not function as a question in speech-act terms, nonetheless it must have the form of an interrogative, as shown below:

(120) Nāsi užī hič'č'a adāz Ø-ay-ä(-si)/*Ø-ay-si,
which boy.ABS.I most first I-come-PST.WIT.INTERR-ATTR/I-come-PST.WIT
di ža žek'-si.
1SG.ERG DEM.ABS beat-PST.WIT
'I beat the boy who came first.' (lit.: which boy came first, I beat him)

Tsez is not the only language of its family that forms free relative clauses based on the interrogative; the attributive use of interrogatives is also found in Tsaxur (Kibrik 1999: 462-463).

Clauses that are homophonous with the interrogative clause can be used either as free relatives or as correlatives, with subtle differences which we will discuss in more detail in the next section. The general formation of these clauses can be schematized as follows:

(121) [Wh-expression Verb-INTERR]

Several properties distinguish free relatives from correlatives; we will discuss these properties in section 3.3 below, and here we will mention just one of them. One of the differences has to do with the fact that only free relatives but not correlatives can have the attributive suffix *–si* (*-zo* in the oblique form), which follows the interrogative suffix, thus:

(122) [Wh-expression Verb-INTERR-ATTR]

However this suffix is often omitted, as in other cases we have discussed in this chapter, which makes (121) and (122) indistinguishable. For the purposes of the structural formation, we will continue considering free relatives and correlatives together, but it is important to keep in mind that the attributive suffix is exclusive to free relatives.

The pattern presented in (121) is extremely productive and can be used to relativize any position in a clause. For example, assuming sentence (123) as the baseline, a series of headless relative clauses/correlative clauses can be formed. We show them with the optional attributive suffix, which is only available in the free relative use:

(123) ħuł babi-y-ä užі žek'-si.
yesterday father-OS-ERG boy.ABS.I hit-PST.WIT
'Yesterday Father beat/hit the boy.'

(124) *free subject relative/correlative*
ħuł (łu) užі žek'-ä(-si)
yesterday who.ERG boy.ABS.I hit-PST.WIT.INTERR-ATTR
'the one that beat the boy yesterday'

(125) *free object relative/correlative*
ħuł babi-y-ä (šebi) žek'-ä(-si)
yesterday father-OS-ERG who/what.ABS hit-PST.WIT.INTERR-ATTR
'the one/whom that Father beat yesterday'

(126) *free temporal adjunct relative/correlative*
neti babi-y-ä užі žek'-ä(-si)
when father-OS-ERG boy.ABS.I hit-PST.WIT.INTERR-ATTR
'when(ever) Father beat the boy'

(127) *free locative adjunct relative/correlative*
nā babi-y-ä užі žek'-ä(-si)
where father-OS-ERG boy.ABS.I hit-PST.WIT.INTERR-ATTR
'where/wherever Father beat the boy'

(128) *free causal adjunct relative/correlative*
šida babi-y-ä užі žek'-ä(-si)
why father-OS-ERG boy.ABS.I hit-PST.WIT.INTERR-ATTR
'for what(ever) reason Father beat the boy'

Free relatives/correlatives with complex wh-expressions are possible but dispreferred; compare (125) and the following examples. The dispreference is particularly strong for complex wh-expressions in situ; (129b) is fully acceptable, and (129a) is questionable at best:

(129) a. ??ħuł babi-y-ä didiw/nāsi užі žek'-ä(-si)

yesterday father-OS-ERG what/which boy.ABS.I hit-PST.WIT.INTERR-ATTR

b. didiw/nāsi užī babi-y-ä ħuł žek'-ä(-si)
what/which boy.ABS.I father-OS-ERG yesterday hit-PST.WIT.INTERR-ATTR
'whichever boy that Father beat yesterday'

With a few exceptions, Tsez does not allow multiple wh-questions (see CH. YY [Interrogatives]), and we were unable to find multi-head correlatives of the type noted for Hungarian (Lipták 2005) and some other languages.

To summarize, the form of free relatives/correlatives mirrors the form of interrogative clauses with a wh-word, although it is only in the past witnessed form that this form is distinct from the declarative.

3.3 Differences between free relatives and correlatives

We already mentioned that free relatives and correlatives differ in that only the former but not the latter can take the attributive suffix *–si/-zo.* However, the direct attributive marker is easily deleted—many instances of its deletion appear throughout this grammar. If so, the two clauses may appear indistinguishable, thus:

(130) [ħuł babi-y-ä šebi žek'-ä(-si)] Ø-ik'i-s.
yesterday father-OS-ERG who/what.ABS hit-PST.WIT.INTERR-ATTR I-go-PST.WIT
'Whoever Father beat yesterday left.'

Only free relatives however can appear in argument positions (see section 3.2), thus, co-occurring with case markers. The absolutive is unmarked, as in (130), and so far, all our examples have featured relative clauses in the absolutive noun phrase position. If a free relative is used in a position other than the absolutive, the oblique attributive form has to be present. Compare (130) and (131):

(131) ħuł babi-y-ä (šebi) žek'-ä-*(zo-)r magalu
yesterday father-OS-ERG who/what.ABS hit-PST.WIT.INTERR-ATTR.OBL-LAT bread.ABS.III
teλ!
give.IMPER
'Give the bread to the whoever Father beat yesterday.'

The clause combining with the lative marker in (131) is an unambiguous free relative; if a correlative is used, neither the attributive marker nor the case marker can be used, and the correlative clause is resumed by a proform in the main clause; such a profom is impossible with a free relative, as shown by (133):

(132) [ħuł babi-y-ä šebi žek'-ä(*-zo-r)] magalu
yesterday father-OS-ERG who/what.ABS hit-PST.WIT.INTERR-ATTR.OBL-LAT bread.ABS.III
nesi-r teλ!
DEM-LAT give.IMPER
'Whoever Father beat yesterday, give him bread.'

(133) [ħuł babi-y-ä šebi žek'-ä-zo-r] magalu

yesterday father-OS-ERG who/what.ABS hit-PST.WIT.INTERR-ATTR.OBL-LAT bread.ABS.III
(*nesi-r) teƛ!
DEM-LAT give.IMPER
'Whoever Father beat yesterday, give him bread.'

Likewise, the following pair of examples presents an unambigious contrast between a free relative in the ergative subject position, (134), and a correlative whose proform appears as the ergative subject, (135):

(134) [Nāsi uži hič'č'a adāz Ø-ay-xo-z-ä] (*hemes-ä)
which boy.ABS.I most first I-come-PRS-ATTR.OBL-ERG DEM-ERG
aħi b-od-o
alarm.ABS.III III-do-IMPER
'Whichever boy comes first is to sound the alarm.'

(135) [Nāsi uži hič'č'a adāz Ø-ay-xo(*-si)] hemes-ä aħi b-od-o.
which boy.ABS.I most first I-come-PRS-ATTR DEM-ERG alarm.ABS.III III-do-IMPER
'The boy who comes first is to sound the alarm.' (lit.: which boy comes first, he is to sound the alarm)

In examples (133) and (135), we observe overt preforms *nesir* and *hemesä*. However, Tsez has extensive argument drop, which means that the proform corresponding to the correlative clause can be missing. The result is the ambiguity between free relatives and correlative clauses in the absolutive position.

Since only free relatives are possible in argument positions, it is free relatives but not correlative clauses that are found in the absolutive subject position of specificational copular clauses (see CH. YY [Agreement] and CH. YY [Reflexives]). For instance, in the following example, the subject of a cleft is a headless relative clause *deber yetixosi* 'one you like' (speaking of a woman, since the verb agrees with the absolutive in gender II):

(136) [Debe-r (šebi) y-eti-xo(-si)] mi-tow yoł.
2SG-LAT who.ABS(.II) II-like-PRS-ATTR 2SG.ABS-FOC be.PRS
SUBJECT PREDICATE
'Who you really like is yourself.'

The funal difference between free relatives and correlative clauses has to do with the restrictions on relativization. Recall that regular externally headed participial clauses do not allow relativization of adnominal genitives and standards of comparison (see section 1.1). The same constraint seems to hold for free relatives. In (137), the attempted free relative is formed on the adnominal genitive; the occurrence of the oblique attributive form and of case marking unambiguously qualifies this expression as a free relative but not a correlative. The sentence is ungrammatical, thus confirming that free relatives obey the same relativization constraints as extrernally headed relatives:

(137) *Eniw [nāzo uži-z γʷʿay-ä mi
mother.ABS.II which.OBL boy-GEN2 dog-ERG 2SG.ABS

ħan-ä]-zo-ƛ-äy q'^{w}arid y-oq-xo.
bite-PST.WIT.INTERR- ATTR.OBL-SUB-ABL upset II-become-PRS
('Mother is upset with whoever it is such that their dog bit you.')

In contrast, correlatives do not have any restriction and in particular they permit the relativization of adnominal genitives and standards of comparison. Thus, the following counterpart of (139) is fully acceptable:

(138) Eniw [nāzo užiz γ^{w}ay-ä mi
mother.ABS.II which.OBL boy-GEN2 dog-ERG 2SG.ABS
ħan-ä] nesi-ƛ-äy q'^{w}arid y-oq-xo.
bite-PST.WIT.INTERR DEM.I.OBL-SUB-ABL upset II-become-PRS
'Mother is upset with whoever it is such that his dog bit you.'

And in the following example, the anaphoric demonstrative, which does not distinguish gender in the absolutive, is ambiguous between referring to the dog and to its owner:

(139) [Nāzo užiz γ^{w}ay-ä mi ħan-ä] šuƛ'-ir
which.OBL boy-GEN2 dog-ERG 2SG.ABS bite-PST.WIT.INTERR forget-CAUS.IMPER
ža!
DEM.ABS
'Which boy's dog bit you, forget it/him.'

The crucial differences between free relatives and correlatives are summarized in the table below:

Table 1. Differences between free relatives and correlative clauses

	Free relative	Correlative clause
takes the attributive suffix *–si/-zo*	yes	no
combines with case marker	yes	no
requires a proform in the main clause	no	yes
appears as subject of specificational copular clauses (clefts)	yes	no
obeys restrictions on the relativization of certain positions	yes	no

4 Free relative clauses with free choice interpretation

The notion of free choice, signaling uncertainty, indifference, or a universal implication, is expressed by concessive clauses, whose predicate is the concessive converb in *–łin*. Concessive clauses correspond to *ever*-free relatives in other languages, as attested by their English translations.

(140) [Eni=babi-y-ä esir-łin] nes-ä esi-x
parents-OS-ERG ask-CONCESS.CVB DEM.I-ERG tell-IPFV.CVB
zow-n-ānu.

AUX.PST-PST.nWIT-NEG
'Although his parents kept asking, he would not tell.'

In concessive correlatives, the concessive clause includes a wh-word with the contrastive topic particle *–gon*, which forms free-choice (FC) expressions (see CH. YY [Particles]). Compare (140) and its free-choice free relative counterparts in (141) and (142):

(141) [Eni=babi-y-ä dice-gon esir-łin] nes-ä
parents-OS-ERG how.much-FC ask-CONCESS.CVB DEM.I-ERG
esi-x zow-n-ānu.
tell-IPFV.CVB AUX.PST-PST.nWIT-NEG
'No matter how much his parents asked, he would not tell.' (Allahes ašuni:13)

(142) [Eni=babi-y-ä łu-r-gon esir-łin] nes-ä
parents-OS-ERG who-LAT-FC ask-CONCESS.CVB DEM.I-ERG
esi-x zow-n-ānu.
tell-IPFV.CVB AUX.PST-PST.nWIT-NEG
'No matter how much his parents asked, he would not tell.' (Allahes ašuni:13)

Concessive clauses with the verb AGR-*oq*- 'become' (which is semantically quite light) represent one of the most neutral ways of encoding free-choice phrases. In such clauses, the absolutive subject of AGR-*oq*- is either expressed by the interrogative, as in (147) below, or is coreferential to the absolutive noun phrase in the main clause, as in (143):

(143) [łina-r-gon *pro*$_i$ r-oq-łin] bix$_i$ teλ
what-LAT-FC IV become-CONCESS.CVB grass.ABS.IV give.IMPER
nesi-r!
DEM.I-AT
'Give him hay for whatever he needs it for.' (Imnajšvili 1963:131)

Concessive clauses are headless, and they can be cross-referenced by an anaphoric expression in the main clause. For example, the concessive clause in (144) is resumed by the anaphorically interpreted *nāsin* 'all':

(144) [Neł-ä šebi-gon r-oy-łin] nāsin gimušaw (yoł).
DEM.nI-ERG what.ABS.IV-FC IV-do-CONCESS.CVB all.ABS.IV tasty be.PRS
'Whatever she makes tastes good.' (lit.: whatever she makes all is tasty)

(145) [ła-de-gon mi Ø-ići-łin] neduga-ni-q-āy
who-APUD.ESS-FC 2SG(.I) I-stay-CONCESS.CVB such-DEF-POSS-ABL
r-iqi-xosi (yoł).
IV-be.gotten-PRS.PTCP AUX.PRS
'Whoever you hang out with you learn from them.'

(146) [Nā-r-gon y-ik'i-łin] huni bit'izi r-oq-oλ!
where-LAT-FC II-go-CONCESS.CVB road.ABS.IV smooth IV-become-OPT
'Wherever you go (speaking to a woman) have a safe journey.'

(147) [Šebi b-oq-łin] goλ'-o žedu t'o-r!
who.ABS(.IPL) II-become-CONCESS.CVB call-IMPER DEM.ABS(.IPL) here-LAT

‘Call whoever you can.’ (a group of peope including males)

Concessive relative clauses can include complex wh-expressions, as illustrated below. This property sets them apart from modal free relatives and definite free relatives, which are incompatible with such complex interrogative phrases.

(148) [Nāsi baru y-ow-łin] neł-qo-r ʕenekizi
which wife.ABS.II II-bring-CONCESS.CVB DEM.nI-POSS-LAT listen
Ø-oq.
I-become.IMPER
‘Whichever wife you choose (lit.: take), listen to her.’

Another way of expressing free choice is by participial relatives which combine with semantically light head nouns such as ‘thing’, ‘person, ‘place’, etc. For example:

(149) [Q’arƛ’o Ø-izi-xosi] žek’u reʕizi Ø-oq-xosi (yoł)
early I-rise-PRS.PTCP person.ABS.I prepare I-become-PRS.PTCP AUX.PRS
r-aq’ʕu šebin r-od-a.
IV-many thing.ABS.IV IV-do-INF
‘The early bird catches the worm.’ (lit.: a person that rises early is prepared to do many things)

(150) [Buži(zi) yäł-ru] šebin t’ubazi r-oq-xosi (yoł).
belief be.PRS-PST.PTCP thing.ABS.IV fulfilled IV-become-PRS.PTCP AUX.PRS
‘Whatever you hope for will come true.’ (lit.: a thing that belief is in will come true)

(151) [Allah-ä näƛ-ru] łina-ƛ’ razi b-oq-a b-āy
God-ERG give-PST.PTCP thing.OBL-SUPER.ESS agree IPL-become-INF IPL-must
eli.
1PL.ABS.IPL
‘We should accept whatever God gives us.’ (lit.: agree on the thing that God gives)

Adverbial clauses

1 General remarks

The majority of Tsez adverbial clauses have a converb as their predicate. A converb is a verbal form that depends syntactically on another verb form that is not its argument. Converbs can be defined negatively as forms that can neither be the only predicate of a simple sentence, nor clausal arguments (Nedjalkov 1995: 97; Haspelmath 1995).

Tsez has a rich system of converbs. The formal marking of converbs is quite diverse, and we will discuss individual converbs below, but for the purposes of classification, two main subtypes can be recognized:

(i) primary converbs, derived from the present tense form of the verb
(ii) specialized converbs

Primary converbs include the perfective (completive) converb in *–n(o)* and the imperfective converb in *–x(o)*. These converbs can be used as predicates of adverbial clauses but they also combine with auxiliaries to form complex tense forms. Both these converbs have suffixes that are homophonous with the suffixes of tense forms used in independent clauses (the unwitnessed past and simple present, respectively).

Specialized converbs only occur as predicates of adverbial clauses, and they constitute the bulk of the material discussed in this chapter. Both sets of converbs can be expressed by simple and complex verbs, and some specialized converbs can be periphrastic. All converbal clauses are predicate-final, but the word order before the predicate can be relatively free and is subject to some general principles that are discussed in CH. YY [Word order].

There is clear distributional evidence that converbs constitute non-finite forms of the verb. Tsez has a series of enclitics that can combine with any category but finite verbs. These include the focus markers *–tow* and *–kin,* the topic markers *–n(o)* (plain topic) and *–gon* (contrastive topic), the coordinator *–n(o)* 'and', and the distributive suffix *-t'a.* These markers freely combine with converbs (although the suffix *-t'a* is more selective, co-occurring with only a subset of converbs, as we discuss below). For example:[1]

(1) Xan-e-s kid-gon [ʕiyay-x-**tow**] ʕiyay-x
king-OS-GEN1 girl.ABS.II-CONTR.TOP cry-IPFV.CVB-FOC cry-IPFV.CVB
y-ič-äsi zow-n.
II-stay-RES.PTCP AUX.PST-nPST.WIT
'The king's daughter kept crying.' (lit.: stayed crying really crying) (Qacis gulu:14)

[1] Here and below we indicate the boundaries of converbal clauses by brackets.

(2) B-iqir-ān-ƛin [neł-ä reƛ’a r-egir-nosi-**gon**]
III-catch-FUT.DEF-QUOT DEM.nI-ERG hand.ABS.IV IV-send-ANT.CVB-CONTR.TOP
t’umi b-oxi-n el-āy…
pigeon.ABS.III III-fly-PST.nWIT there-ABL
‘As she reached with her hand (lit.: when she sent her hand) to catch it, the pigeon flew away…’ (based on Moƛu:67)

(3) [Ič’č’a-n y-eɣe-ni esi-y-ä [sasił-zaƛ’or-**tow-n**] xexłiƛ’
most-and II-young-DEF sibling-OS-ERG get.dark-POST.CVB-FOC-and quickly
idu-ɣor ƛa-ƛin daʕba b-ič-ir-łin]
home-VERS go.IMPERF-QUOT dispute.ABS.III III-stay-CAUS-CONCESS.CVB
neł-qo-r žedu ʕenekizi r-oq-no-ānu.
DEM.nI-POSS-LAT DEM.PL.ABS(.nIPL) listen nIPL-become-PST.nWIT-NEG
‘Although the youngest sister insisted (lit.: sent dispute) that they should go quickly to get home before it gets dark, they did not listen to her.’ (Č’ikayn, murin, hiƛun:7)

Finite verbs can be coordinated asyndetically or with such conjunctions as *amma* ‘but, but never with the coordinating enclitic *–n(o)*; see also CH. YY [Coordination] and CH. YY [Particles]. Meanwhile, converbs easily combine with *–n(o),* as shown in (3) and (55) below. This again sets converbs apart from finite verbs.

With the exception of some coordinate structures (CH.YY [Coordination]), the main way of linking event sequences in a complex sentence is through the use of converbs. Such complex sentences can include a string of converbal clauses but may have only one finite clause. Sentences formed by joining one or more converbal clauses to a finite clause are referred to as “clause chains” (Longacre 1985: 263ff.; Foley and van Valin 1984: ch. 6), a widespread phenomenon found across many languages. While clause chains are not unique to Nakh-Dagestanian, these languages make extensive use of such chains; see Good (2003) for Chechen, Nichols (2011) for Ingush, Forker (2013: Ch. 7, 21, 25) for Hinuq, Kibrik (2001: 595-612) for Bagwali, Kibrik (1999: 542-545) for Tsaxur, and Haspelmath (1993: 303-309) for Lezgian.

The clause chain structure is often reinforced by the addition of the enclitic *–n(o)* ‘and’ to the constituent immediately preceding the converb. For example, in (6), *–n(o)* appears on the non-verbal part of the complex predicate, *q’ʷarid* ‘sad’, and in (22), it appears on the noun phrase *eniw* ‘mother’. See also examples (27), (30), (31), (41) below, and see Forker (2013: 543) for a similar pattern in Hinuq. Care should be taken to distinguish the clause-chaining use of *n(o)* from its topic-marking function (the topic-marking *-n(o)* is not limited positionally to the immediate preverbal constituent), and from the regular ‘and’, which appears on two or more constituents (see also CH. YY [Particles]). The clause-chaining *–n(o)* is always optional, and its presence or absence does not correlate with the coordinate vs. subordinate status of the converbal clause in which it appears (see section 5).

In what follows, we will first present different types of converbs (sections 2 and 3), then turn to coreference across converbal clauses (section 4); we address the status of these clauses as coordinate or subordinate in section 5. In addition to the converbal clauses, clauses with masdar/infinitival predicates and clauses with attributive predicates can also be used adverbially, and we will present such clauses in sections 6 and 7 respectively.

2 Converbs and their properties

2.1 Primary converbs

2.1.1 Perfective converb

The perfective converb in *–n(o)* is probably the most frequently used member of its class; it is also, semantically, the least specified. Its form in *-n*(*o)* is homophonous with the unwitnessed past form in the affirmative. Under negation, the two forms differ; negative unwitnessed past has the suffix *–ānu*, but the negative perfective converb has the suffix *–inč'ey*. Only the finite form can occur in the interrogative. As we already mentioned above, only the converb can co-occur with topic and focus markers.

The converbal and finite forms also differ in their time reference; the time reference of a converbal clause is dependent on the time of the main clause, which means that a perfective converbal clause can have present or future time reference. Such time reference is impossible for finite verbs, which express exclusively the past. In (4), the future temporal reference of the converb is determined by the main predicate *biyrān*:

(4) Elo-r Ø-ik'i-n neła-s adres
there-LAT I-go-PFV.CVB DEM.nI-GEN1 address.ABS.III
b-iy-r-ān di.
III-know-CAUS-FUT.DEF 1SG.ERG
'I will go there and find out her address.'

In example (5) below, the event of eavesdropping, expressed by the converb *teqerno,* is in the future and takes its time reference from the purpose masdar *esanix*. Meanwhile, the main predicate *egirno* is in the unwitnessed past.

(5) Xan-ä wazir Ø-egir-no [[žed-ä elo teł
king-ERG vizier.ABS.I I-send-PST.nWIT DEM.IPL-ERG there inside
b-äd-iru xabar-no teq-er-no] xizyo
III-do-PST.PTCP conversation.ABS.III-and hear-CAUS-PFV.CVB after
nesi-q es-ani-x].
DEM.I-POSS.ESS tell-MASD-AD.ESS
'The king sent his vizier to eavesdrop on their conversation in there so that he could tell him about it thereafter.' (Xanno, nesisgon łʿono užin:49)

Another dissimilarity between the converb and the homophonous unwitnessed past form has to do with evidentiality. Whereas unwitnessed past refers to situations for which the speaker does not have direct evidence, the perfective converb may refer to situations where the speaker is/was present. This is particularly clear in reports about emotions and internal states. With finite verbs denoting past emotions, it is normal to use the unwitnessed form in speaking about second or third person; after all, the speaker does not have direct access to the internal state of such persons and can only make judgments about that internal state by inference. On the other hand, when

reporting one's own emotional state, the speaker can use witnessed past. Perfective converbs are quite natural in reports of a speaker's emotions, with the finite verb appearing in the witnessed past form. For example:

(6) [Q'^{w}arid-no y-oq-no] dä-q šebin-kin
sad-and II-become-PFV.CVB 1SG-POSS.ESS thing.ABS.IV-FOC
r-uq^{ʕ}ik'-a k^{w}eze y-oq-inč'u.
IV-hide-INF able II-become-PST.WIT.NEG
'I was upset and could not hide anything.' (woman speaking)

2.1.2 Imperfective converb

This converb has the suffix *–x(o),* which is homophonous with the suffix of the present tense. As with the perfective converb, this converb takes its temporal reference from the main predicate, while the temporal reference of a predicate in the present tense is specified. Imperfective converbal clauses can be combined with finite clauses whose predicates are in the past or future, and the interpretation of the converbal clause (as denoting an event that is simultaneous with the event described in the main clause) is determined by the finite verb's tense. For example, in (7), the converb bears past time reference, due to the tense of the finite predicate:

(7) [Išam-t'a b-is-xo] caƛi-n.
aim.ABS.III-DISTR III-take-IPFV.CVB throw-PST.nWIT
'He aimed and made a shot.' (Ħasanno Ħusenno:61)

2.2 Specialized converbs

Specialized converbs are formed by a series of suffixes attached to the verb stem. The rules determining stem alternations are discussed in CH. YY [VERB MORPH], so in this chapter we will only focus on the suffixes used with the stem.

The majority of specialized converbs have spatial suffixes. Spatial suffixes are also used to derive adverbial expressions from nouns (see CH.YY [Adverbial phrases]), which underscores the similarity between adverbial clauses and adverbial phrases. Several converbs are formed by combining the verb stem with a suffix from the SUPER series: super-essive *–ƛ'(o)*, and (a suffix built upon) super-lative: *-ƛ'o-rey*. These converbs, illustrated for the verb 'read' below, have the general semantics of simultaneity. We gloss converbs in *-ƛ'orey* as "durative I", in contrast with another durative form which will be presented shortly.

(8) t̲'et'er-ƛ'o
read-SIM.CVB
'while reading'
(9) t̲'et'er-ƛ'orey
read-DUR.I.CVB
'during/in/while reading'

The suffix of the AD series *–x(o)* appears in the converb in *–xoy*, thus:

(10) t'et'er-xoy
read-CAUSAL.II.CVB
'because X read'

A number of converbs are formed with the suffix *–za*; this suffix then combines with spatial markers, such as in-essive, super-essive, etc. Each of these *za*-based forms has a specific interpretation, although the causal converbs in *–zaƛ'* and *–zaq* are used interchangeably. Thus:

(11) t'et'er-zaƛ'
read-CAUSAL.I.CVB (<SUPER.ESS)
'because one reads'
(12) t'et'er-zaq
read-CAUSAL.I.CVB (<POSS.ESS)
'because one reads'
(13) t'et'er-zaƛ'or
read-POST.CVB (<SUPER-LAT)
'before/until reading' (see also example (3) above)

The durative converb in *–zey* is probably based on the form in *–za* as well:

(14) t'et'er-zey
read-DUR.II.CVB (<SUPER-LAT)
'during/in/while reading'

In addition to converbs formed with spatial suffixes, Tsez has a terminative converb, formed with the suffix *–ace,* based on the equative suffix *–ce*. Thus:

(15) t'et'r-ace
read-TERM.CVB
'till one reads; as long as one reads'

Two converbs may be diachronically related to participles. These are the immediate anterior converb in *–run* (<*ru-n*) and the anterior converb in *–nosi* (*-no-si*, where *si* is the attributive suffix).

(16) t'et'är-un (<t'et'är-run)
read-IMM.CVB
'as soon as one reads'
(17) t'et'er-nosi
read-ANT.CVB
'after reading'

There are three conditional converbs: non-counterfactual converb in *–näy* and counterfactual ending in *–łi* and *–łiri*. In the glosses, we mark the non-counterfactual converb as "conditional," without further qualification, and add CF for the other two converbs.

(18) t'et'er-näy
read-COND.CVB
'if one reads'

(19) a. t'et'er-łi
read-COND.CVB.CF
b. t'et'er-łiri
read-COND.CVB.CF
'if one had read'

Concessive converbs are formed by the addition of the suffix *–łin*:

(20) t'et'er-łin
read-CONC.CVB
'although one reads/read; despite reading'

The table below summarizes the converbs presented in this section. Some converbs only occur in the affirmative, and we indicate that in the table as well. We again illustrate these converbs using the verb *t'et'r-* 'read'.

Table 1. Tsez converbs

Converb	**Suffix**	**Occurs in the negative form**	**Example (affirmative/negative)**
Perfective	-n(o)	Yes	t'et'er-no/t'et'r-inč'ey
Imperfective	-x(o)	No	t'et'er-xo/--
Anterior	-nosi	Yes	t'et'er-nosi/t'et'r-inč'i-nosi
Immediate anterior	-run	Yes	t'et'är-un/t'et'är-inč'i-run
Simultaneous	-ƛ'(o)	No	t'et'er-ƛ'o/--
Durative I	-ƛ'orey	No	t'et'er-ƛ'orey/--
Durative II	-zey	No	t'et'er-zey/--
Posterior	-zaƛ'or	Yes	t'et'er-zaƛ'or/t'et'r-inč'i-zaƛ'or
Terminative	-ace	No	t'et'r-ace/--
Causal I	-zaƛ'/-zaq	Yes	t'et'er-zaƛ'/t'et'r-inč'i-zaƛ' t'et'er-zaq/t'et'r-inč'i-zaq
Causal II	-xoy	Yes	t'et'er-xoy/t'et'r-inč'i-xoy
Conditional, non-counterfactual	-näy	Yes	t'et'er-näy/t'et'r-inč'i-näy
Conditional, counterfactual	-łi/- łiri	Yes	t'et'er-łi(ri)/t'et'r-inč'i-łi(ri)
Concessive	-łin	Yes	t'et'er-łin/t'et'r-inč'i-łin

As this table shows, temporal converbs constitute the largest portion of the Tsez converbal lexicon. In the next section, we will explore the meaning and usage of various converbs.

3 Types of converbal clauses based on their meaning

3.1 Temporal converbal clauses

Several converbs can express temporal relations, and their relationship to the predicate of the main clause can be characterized according to two criteria: (i) is the event denoted by the converbal clause contemporaneous with the event in the main clause, or does it precede or follow that event? and (ii) is the event denoted by the converbal clause construed as durative or not?

3.1.1 Clauses with perfective and imperfective converbs

As we already mentioned, the converb in *–n(o)* is semantically the most neutral form of the event converb. Although the converb itself is completive/perfective, it is widely used in expressing both simultaneous and sequential events. When joined to another clause, it can be rendered in English as 'and' (expressing simultaneity) or 'and then' (expressing sequentiality). For example, in (21*), -n(o)* has a clear simultaneous reading, and in (22), it has a clear sequential reading:

(21) [ʕAčqˤay-n] mekoy-xosi yoł xexoy-bi.
be.thirsty-CVB be.hungry-PRS.PTCP be.PRS young.animal-PL.ABS.nIPL
'The young animals are thirsty and hungry.'

(22) [Sosi eniw-n goƛ'i-n] xabar es-o.
at.first mother.ABS.II-and call-CVB news.ABS.III tell-IMPER
'First call Mother and then tell the news.'

Clause chains with multiple perfective converbs are extremely common, and constitute a typical way of obtaining cohesion in a narrative sequence. The following example illustrates a particularly long sentence with three perfective converbs (*rišin, kurno*, and *xecin*). The converbal clauses with the predicates *rišin* and *xecin* are adjoined to the main clause, and the converbal clause whose predicate is *kurno* is embedded under the converbal clause *aybi idutow xecin* 'left the birds at home'.

(23) [Boc'a-n zey-bi-n ɣuro yäł-zā
wolves.COLL.ABS.nIPL-and bear-PL.ABS.nIPL-and cattle.ABS.nIPL be.PRS-LCV.CVB
reˤč'-u-ƛ ayˤn-ä teł r-iši-n]
calf.shed-OS-SUB.ESS cowshed-IN.ESS inside nIPL-drive.into-PFV.CVB
[aɣ-bi [giri-ma-bi-n kur-no] idu-tow
bird-PL.ABS.nIPL pole-PL-PL.ABS.nIPL-and throw-PFV.CVB home-FOC
xeci-n] beł-i-s čanya-bi-n reso-bi-n
leave-PFV.CVB wild.goat-GEN1 goat-PL.ABS.nIPL-and roe-PL.ABS.nIPL-and
čolow yäł-zā hiɣa-r r-egir-no.
straw.ABS.IV be.PRS-LCV.CVB hayloft-LAT nIPL-send-PST.nWIT
'(She) drove the wolves and bears into the calf-shed of the cow-shed where the cattle were; she left the birds in the house, having put up poles, and she let the wild goats and roes in the hayloft where there was straw.' (Isis rigł:7)

In a particular subcase of its simultaneous use, the perfective converb denotes the manner in

which a given event proceeds; thus, this type of converbal clause can be used in the function of a manner adverbial. Verbs of motion are most commonly used in this function, specifying in more detail the general motion expressed by the finite verb. For example,[2]

(24) a. [Uži-bi$_i$ b-et'u-n] *pro*$_i$ k'oƛanay-x.
boy-PL.ABS.IPL IPL-jump-PFV.CVB run-PRS
b. Uži-bi$_i$ [*pro*$_i$ b-et'u-n] k'oƛanay-x.
boy-PL.ABS.IPL IPL-jump-PFV.CVB run-PRS
'The boys are jumping up and down.'

Sometimes the expression of manner can have additional connotations as well; for instance, 'frightened' in (25) could be interpreted either as the manner of the running or the reason for the running:

(25) B-ˁuƛ'-no k'et'u b-ox-xo.
III-be.afraid-PFV.CVB cat.ABS.III III-run-PRS
'The cat is running in fear (frightened).'

In the next example, we find a particularly long string of converbs specifying the abrupt, rapid manner of motion. The converbal string *bet'un k'oƛin* is identical to the string shown in (24) (the verb *k'oƛ-* takes a converbal clause); it is then joined to the verb AGR-iz- 'rise', and the whole converbal string is associated with the main predicate:

(26) Boc'i b-et'u-n k'oƛi-n b-izi-n
wolf.ABS.III III-jump-PFV.CVB run-PFV.CVB III-rise-PFV.CVB
b-oxi-n el-āy.
III-run-PST.nWIT there-ABL
'The wolf jumped up and ran away.'

Some other examples illustrating converbal manner clauses are provided below. In (27), the manner converbal clause *žarno yiynč'ey* '*lit.*: (she was) unknown to the young man' is embedded in the perfective converbal clause with the predicate *yoqno*. Note that in this example, although the lower converbal clause denotes manner, its constituent is still marked with *–n(o)* 'and':

(27) [Sasaqozox [ža-r-no y-iy-nč'ey] maħo-r-no
early.in.the.morning lad-LAT-and II-know-PFV.CVB.NEG outside-LAT-and
y-oq-no] q'orol-ä ža-z babiw-q esi-n
II-become-PFV.CVB widow-ERG lad-GEN2 father-POSS.ESS tell-PST.nWIT
nesi-ƛ' yäł-ru q'^{w}ariłi-ł-äy.
DEM.I-SUPER.ESS be.PRS-PST.PTCP sadness-CONT-ABL
'In the morning the widow slipped outside unnoticed by the young man and told his father about the woes that befell him.' (Allahes ašuni:21)

[2] In this example, *užibi* could either be part of the converbal clause or the matrix clause; we present both schematics.

This use of perfective converbs as denoting the manner of motion allows us to characterize it as a path-incorporating language in terms of Talmy's classification of motion verb constructions (Talmy 1972, 1975, 1985, 2000; see also Croft 2003: 220-224; Rappaport Hovav and Levin 2001). Talmy's classification is based on the grammatical encoding of the two semantic components of the motion event—manner and path. The manner-incorporating type, instantiated by English, expresses manner of motion in the main verb. The path-incorporating type, exemplified by Spanish, encodes path in the main verb and encodes manner in a separate, satellite construction. Tsez is clearly a member of this type. The manner of motion is expressed primarily by perfective converbs, but occasionally, other types of converbs can serve that role as well.

In terms of word order, converbal clauses most commonly appear before the main predicate, either at the left periphery of the sentence, or as a center embedding. An example of center embedding is shown in
(23) above, where the clause with the converbal predicate *kurno* is center-embedded in another converbal clause. These are just preferences, and there are no categorical restrictions preventing a converbal clause from following the finite clause, as in the following text example:

(28) K'et'u-z elo aw yoł-ƛin rok'-ƛ'o-r-no
cat-GEN2 there mouse.ABS.III be.PRS-QUOT heart-SUPER-LAT-and
r-ay-n [[b-et'u-n] bˤeƛ-e-z q'ˤim-ƛ'o-r
IV-come-PST.nWIT III-jump-PFV.CVB aper-OS-GEN2 head-SUPER-LAT
k'oƛi-n].
run-PFV.CVB
'When it (the cat) saw that, it thought that it was a mouse that jumped on the aper's head.' (K'et'us hunar:17)

The imperfective converb refers to events that occur simultaneously with the main event, which mean that it overlaps in function with the perfective converb. The main difference between the two converbs has to do with their aspectual interpretation. The imperfective converb often underscores the ongoing nature of the event. For example, in (29), the emphasis is on the event-in-progress nature of withering away, as accentuated by the adverbial phrase 'day after day':

(29) Bečedaw žek'u-s [ɣud-ƛ'-āy ɣud-ƛ'o-r ħalaq'
rich man-GEN1 day-POSS-ABL day-POSS-LAT emaciated
Ø-oq-xo] uži Ø-ik'i-x zow-n.
I-become-IPFV.CVB boy.ABS.I I-go-IPFV.CVB be.PST-PST.nWIT
'Day after day a rich man's son continued to wither away.' (Allahes ašuni:12)

Similarly, in (30), the use of the imperfective converb emphasizes the ongoing nature of speaking; the use of the *ing*-form in the English translation is intended to reflect that. In (31), all the events are construed as punctual:

(30) [nes-ä muši-n kur-no] neła-r [eλi-x]
DEM.I-ERG breath.ABS.III-and throw–PFV.CVB DEM.nI-LAT say-IPFV.CVB
teq-no…
hear-PST.nWIT
'She heard him sigh and then heard him saying…' (lit.: she heard as he was saying)
(Allahes ašuni:19)

(31) [nes-ä muši-n kur-no] neła-r [eλi-n]
DEM.I-ERG breath.ABS.III-and throw–PFV.CVB DEM.nI-LAT say-PFV.CVB
teq-no…
hear-PST.nWIT
'She heard how he sighed and said…'

Because imperfective converbs denote ongoing events, they are infelicitous with individual-level predicates. This kind of infelicity mirrors the English situation, in which individual-level predicates are incompatible with the progressive, cf.:

(32) a. *Kim is knowing mathematics/the answer.
b. *The mountain was being tall.
c. ?Sandy was being able to lift 60 lbs.

Whereas regular present tense use of individual-level predicates is completely acceptable, these predicates are rejected in simultaneous imperfective converbal clauses; our informants offer perfective converbs (or other forms) instead. Compare the contrast between (33a) and (33b):

(33) a. *[Alpawit b-iy-x] pat'i-r ħašiw
alphabet.ABS.III III-know-IPF.CVB Fatima-LAT thick
t'ek-ma-bi t'et'r-a r-eti-x.
book-OS.PL-PL.ABS.nIPL read-INF IV-like-PRS
b. [Alpawit b-iy-n] pat'i-r ħašiw
alphabet.ABS.III III-know-PFV.CVB Fatima-LAT thick
t'ek-ma-bi t'et'r-a r-eti-x.
book-OS.PL-PL.ABS.nIPL read-INF IV-like-PRS
'Fatima knows the alphabet and likes to read thick books.'

Imperfective converbal clauses often include distributive expressions, primarily noun phrases or adverbs marked with the distributive suffix *–t'a* (see CH.YY [Noun phrase] for a detailed discussion of this suffix). We found 82 instances in folklore texts (Abdulaev and Abdulaev 2010) of the distributive marker *–t'a* appearing on a constituent of a converbal clause. Of these 82 occurrences, *–t'a* appeared with the imperfective converb in 68 instances (cf. example (7) above), and only in ten cases did it appear with the perfective converb. Of the other occurrences, there were three distributive phrases in the causal converbal clause, and one in the anterior converbal clause. The low numbers for causal and anterior clauses are not surprising, since their predicates are specialized, rare converbs. However, perfective and imperfective converbs have comparable frequency, so the imperfective bias of distributive expressions is quite striking. To add to these statistics, we also observed that the distributive suffix appeared on the converb itself; there were 17 instances where the suffix occurred with the imperfective converb, as

illustrated in (34):[3]

(34) Neła-r r-iy-x [babiy-ä [uži-q-āy b-is-xo-t'a]
DEM.nI-LAT IV-know-PRS father-ERG boy-POSS-ABL III-take-IPFV.CVB-DISTR
micxir c'i-da-ɣor kur-xosi
money.ABS.III fire-APUD-VERS throw-PRS.PTCP
yäł-ru-łi].
be.PRS-PST.PTCP-NMLZ
'She knows that father takes money from the son and throws it into fire.'
(Debi xarži anu yedu:13)

The correlation between the event-in-progress interpretation and the presence of distributive expressions is consistent with the general semantics of distributivity, which involves a distribution of described eventualities over different locations, different times, and/or different participants. In fact, eventualities that are thought of as extended in space and/or time are often expressed by imperfectives in languages with the perfective/imperfective distinction. To put this differently, both the distributive and the imperfective have a plural/repetitive semantic component. It is therefore no accident that there is a connection between distributive marking and the imperfective converb. That, in turn, raises the question of which converbs can and cannot combine with the distributive marker. Within the primary converbs, the perfective converb is incompatible with the distributive. Compare the following examples, where the distributive expression is possible in the perfective converbal clause (35a), but actual distributive marking of the converb is ungrammatical (35b):

(35) a. [Micxir babiy-ä łox-uyrax c'i-da-ɣor-t'a
money.ABS.III father-ERG three-four.times fire-APUD-VERS-DISTR
kur-no] Ø-ik'i-n.
throw-PFV.CVB I-go-PST.nWIT
'Father threw money into the fire three or four times and left.' (based on Debi xarži anu yedu:10)
b. *[Micxir babiy-ä łox-uyrax c'i-da-ɣor
money.ABS.III father-ERG three-four.times fire-APUD-VERS
kur-no-t'a] Ø-ik'i-n.
throw-PFV.CVB-DISTR I-go-PST.nWIT
'Father threw money into the fire three or four times and left.' (based on Debi xarži anu yedu:10)

Note that both forms, the imperfective and the perfective, are homophonous with tensed forms,

[3] In five other instances, *–t'a* occurred with the terminative converb, as in the example below:

(i) Howži hudu žedu xexbi ax
now so DEM.PL children.ABS(.IPL) stomach.ABS.IV
r-oq-ace-t'a b-iš-no.
IV-become-TERM.CVB-DISTR IPL-eat.ITR-PST.nWIT
'Since then, the children ate till they were full.' (Beqes ʕUneyzat:81)

so their contrast with respect to distributivity cannot be explained just by similarity to tense. Furthermore, the fact that a converb denotes an ongoing event is not sufficient to allow it to combine with *–t'a.* The durative converbs in *-ƛ'orey* and *–zey* and the simultaneity converb in *-ƛ'o* do not combine with the distributive suffix either. Thus:

(36) a. *t'et'er-ƛ'orey-t'a
read-DUR.I.CVB-DISTR
b. *t'et'er-zey-t'a
read-DUR.II.CVB-DISTR
c. *t'et'er-ƛ'o-t'a
read-SIM.CVB-DISTR

To anticipate the facts presented below, we find that only two converbs, imperfective and terminative, can be marked with the distributive *-t'a.*

3.1.2 Clauses with specialized temporal converbs

Anterior and immediate converbs indicate that the event expressed in the converbal clause precedes the event in the main clause. For example:

(37) [Ix-da-xo-si zaman b-ay-nosi] žed-ä
spring-OS-AD.ESS-ATTR time.ABS.III III-come-ANT.CVB DEM.IPL-ERG
sadaqay moči b-iƛi-n.
together field.ABS.III III-plough-PST.nWIT
'After spring came they ploughed together.' (Zirun zeyn:3)

(38) [ħaƛu-xo-zo-x-āy Ø-uy-xo-r Ø-ay-nosi] xan-ä
drink-PRS.PTCP-OS-AD-ABL I-truly-AD-LAT I-come-TEMP.CVB king-ERG
esir-no…
ask-PST.nWIT
'After the king became sober again he asked…' (Bown bownč'ey, zown, zownč'ey, besuroza at'es riƛini rac'xo:38)

The immediate anterior converb also denotes a preceding event, but as its name suggests, it emphasizes *immediate* precedence. This is often translated with the English 'as soon as', as in the following example:

(39) Ža gulu [sis čuret' b-äk'-run] hawa-ƛ'
DEM horse.ABS.III one whip.ABS.III III-hit-IMM.CVB air-SUPER.ESS
b-ik'i-n.
III-go-PST.nWIT
'As soon as it received one touch of the whip, that horse would fly (lit.: go) up in the air.' (Qacis gulu:16)

Causal converbs can also express precedence (see also Imnajšvili 1963: 225-226). Examples (40) and (41) illustrate this use of causal converb I (in example (40), the converb is embedded in a relative clause:

(40) [Y-eɣe-zaλ’] kid žäk’-inč’i-ru eni-y-ä
II-young-CAUSAL.I.CVB girl.ABS.II beat-NEG-PST.PRT mother-OS-ERG
xizyo nełā neła-s λ’ˁontu-bi žek’-a r-āy.
later REFL.nI-GEN1 knee-ABS.PL.nIPL beat-INF nPL-must
‘A mother who did not beat her daughter when she was little will have to beat her own knees later.’

(41) [[Idu-r-no Ø-ay-n [wˁałe-r q’ˁim-no kur-no]
home-LAT-and I-come-PFV.CVB down-LAT head.ABS.IV-and throw-PFV.CVB
xediw Ø-iči-zaq] bar-ä esir-no…
husband.ABS.I I-stay-CAUSAL.I.CVB wife-ERG ask-PST.nWIT
‘When/because the husband came home hanging his head, the wife asked…’ (Eniws esiw:28)

Example (42) and (43) show the temporal use of causal converb II, which is also common; the temporal interpretation of this converb is typically associated with the meaning ‘as soon as’:

(42) [Ža r-ukay-xow] k’et’u-z elo aw yoł-λin
DEM.ABS.IV IV-see-CAUSAL.II.CVB cat-GEN2 there mouse.ABS.III be.PRS-QUOT
rok’-λ’o-r-no r-ay-n b-et’u-n bˁeλ-e-z
heart-SUPER-LAT-and IV-come-PST.nWIT III-jump-PFV.CVB aper-OS-GEN2
q’ˁim-λ’o-r k’oλi-n.
head-SUPER-LAT run-PFV.CVB
‘As soon as/because it (the cat) saw that, it thought that it was a mouse that jumped on the aper’s head.’ (K'et'us hunar:17)

(43) [Di y-ok’ eł-xoy-tow] esir-a ø-ay-si že
1SG.ABS(.II) II-tear.away-CAUSAL.II.CVB-FOC ask-INF I-come-PST.WIT DEM.ABS(.I)
dā-z obiz esiy-de-r.
1SG-GEN2 father-GEN2 sibling-APUD-LAT
‘As soon as I escaped he went to my father’s sister to ask (for my hand in marriage).’

Turning now to simultaneous converbs, the event expressed by such a converb occurs at the same time as the event encoded in the main clause. For example:

(44) Nes-ä žedu … [r-egi-λ’] r-egir-no
DEM.I-ERG DEM.PL.nIPL nIPL-be.loose-SIM.CVB nIPL-send-PFV.CVB
xec-äsi zow-n.
leave-RES.PTCP AUX.PST-PST.nWIT
‘He left them free.’ (lit.: sent them being free) (Wasiyat:3)

(45) ħaži-n q’ˁuna-n esna-z-ä ged-ma-bi
exchange-PST.nWIT two.OS-COLL sibling-OS.PL-ERG garment-OS.PL-PL.ABS.nIPL
[huni-x r-ik’i-λ’-tow].
road-AD.ESS nIPL-go-SIM.CVB-FOC
‘The two sisters traded dresses while on the road (as they were going on the road).’ (Eniwn, łˁonon kidno:32)

With the simultaneous converb, the "ongoing/durative" interpretation of the event is optional; durativity can be inferred, as in (45), but it is not an obligatory component of the converbal meaning. Meanwhile, the two durative converbs specifically serve to emphasize the ongoing nature of the event they denote. For example:

(46) Neširu maħo-r y-oq-ƛ'orey, didiw-ƛa ła-s
in.the.evening outside-LAT II-become-DUR.I.CVB which-INDEF who-GEN1
yäł-ru r-iy-x-anu-si r-iłe qˢaƛu-quy
be.PRS-PST.PTCP IV-know-PRS-NEG-ATTR IV-similar noise-rumpus.ABS.IV
teq-no.
hear-PST.nWIT
'In the evening, as she was walking outside, she heard some strange (lit.: unknown what or whose) noise.' (Isis rigłi:4)

(47) Di ša b-od-ani-x k'udi q'uq'i-ƛ'orey
1SG.ERG wine.ABS.III III-do-MASD-AD.ESS grapes.ABS.III mix-DUR.I.CVB
elo šet'u b-ut-äsi hadam-bi b-oq-si.
there around IPL-turn-RES.PTCP person-PL.ABS.IPL IPL-become-PST.WIT
'When I was mixing the grapes to prepare wine, people were standing there around (me).' (based on Xanno, nesisgon łˢono užin:81)

(48) [[Haq-ä Ø-ogu-n] heresi mec esi-xosi-ni
mouth-IN.ESS I-stretch-PFV.CVB false language.ABS.III tell-PRS.PTCP-DEF
ƛex-äsi yäł-zay] b-uy-xo-r mec
remain-RES.PTCP be-DUR.II.CVB III-real-AD-LAT language.ABS.III
esi-xosi-ni ħal-a-r-no Ø-oƛix-no.
tell-PRS.PTCP-DEF state-OS-LAT-and I-appear-PST.nWIT
'While the lying one stayed with his mouth agape, the truthful one came to the rescue.'(Bełiqanbi:16)

As far as we can tell, the two durative converbs have the same meaning, but their distribution is different. The form in *–zay/-zey* (durative II) occurs mainly with the verb 'be', whereas the form in *-ƛ'orey* (durative I) is found elsewhere. As a result, durative I seems more common, if only because it can occur with more verbs.

Finally, two temporal converbs are used to express events that follow the event denoted by the main predicate. The most common of these is the posterior converb, illustrated in the following examples (see also example (3) above). The posterior converb denotes an event that occurs after the event expressed in the main clause:

(49) [Ciyo-s put b-agi-zaƛ'or] žek'u-s ħal
salt-GEN1 bushel.ABS.III III-lick-POST.CVB man-GEN1 state.ABS.III
b-āy-nč'i.
III-know.FUT-NEG
'Before you choose a friend eat a bushel of salt with him.' (lit.: one will not know the man's character until they lick a bushel of salt)

(50) [Ža b-ay-zaƛ'or] łˢono-n esna-bi
DEM.ABS(.III) III-come-POST.CVB three-COLL sibling-PL.ABS.IPL

iħu-n b-oɣ-no taqˀ-a-ɣor-gon
river.ABS.III-and III-pull-PFV.CVB over.there-IN-VERS-CONTR.TOP
b-ok'ł-äsi zow-n.
IPL-escape-RES.PTCP AUX.PST-PST.nWIT
'The three brothers crossed the river (lit.: pulled the river) and escaped to the other side before it (=the dragon) came.' (C'iɣruk':30)

The terminative converb denotes the end point of the event expressed in the main clause, so it presupposes a tighter connection between the two events than the posterior converb does. For example, in (51), *ax roqace* 'till the stomach is full (lit.: becomes)' sets the end point of eating. Note that this converb, like the imperfective converb above, combines with the distributive suffix.

(51) Howži hudu žedu xexbi ax
now then DEM.IPL children.ABS(.IPL) stomach.ABS.IV
r-oq-ace-t'a b-iš-no.
IV-become-TERM.CVB-DISTR IPL-eat.INTR-PST.nWIT
'After that the children ate till they were full.' (Beqes ʕUneyzat:81)

Terminative and posterior converbs often combine with the focus particle *–kin* (see CH. YY [Particles]), which serves to emphasize the endpoint of the event denoted by the converbal predicate. The particle *–kin* is particularly common in negative contexts, and it typically appears on a converb joined to a clause with a negative predicate. For example:

(52) [Qaħłi b-egira-ce]-kin b-iči-nč'u.
dawn.ABS.III III-send-TERM.CVB-FOC III-stay-PST.WIT.NEG
'They did not even wait till dawn.'

(53) [ɣudi qˀaši-zaƛ'or]-kin žedu bužzi
day.abs.iv dawn-POST.CVB-FOC DEM.ABS(.IPL) believe
b-oq-no-ānu.
IPL-become-PST.nWIT-NEG
'Before the day came (lit.:dawned) they could not believe it.'

We summarize the Tsez inventory of temporal converbs in the following table.

Table 2. Temporal converbs
(C: event expressed by the converb; M: event expressed by the main predicate)

	Relation to the event expressed in the main clause	**Expression of an ongoing/durative event**
Perfective	C precedes M	No
Anterior	C precedes M	No
Immediate anterior	C precedes M	No
Imperfective	C and M are coextensive	Yes
Simultaneous	C and M are coextensive	No
Durative I	C and M are coextensive	Yes
Durative II	C and M are coextensive	Yes
Posterior	C follows M	No
Terminative	C follows M	No

3.2 Manner converbal clauses

There are no dedicated manner converbs, but temporal converbs are often used to express the manner of an event. The perfective converb is the most common predicate in manner adverbial clauses. We have already presented instances of this converb's manner use (see section 2.1.1). Sometimes, the manner reading of the perfective converb may not be fully distinguishable from the temporal reading. For instance, in the next example, we find two perfective converbs; both can be interpreted temporally ("they ate when they sat down for a moment' and "the mirror appeared when it fell out") or as denoting manner ("they ate being seated for a moment" and "the mirror appeared by falling out"):

(54) [Elo [ence q'ˤida-n b-iči-n] b-iš-ƛ'oräy] Ø-eɣe-ni
there a.little down-and IPL-stay-PFV.CVB IPL-eat.ITR-DUR.I.CVB I-young-DEF
esiw-s ħam-āy č'ikay [y-ˤoƛ'un] y-oƛix-no.
brother-GEN1 chest-IN.ABL glass.ABS.II II-fall-PFV.CVB II-appear-PST.nWIT
'When they were eating seated there for a brief moment, the mirror fell out of from under the younger brother's shirt.' (Łux di yik'a yay?:23)

Imperfective converbal clauses can also express manner; in the following example, the imperfective converbal clause[4] is coordinated with the perfective converb and the frozen converbal *retinč'ey* 'unwillingly' (from the negative perfective converb of AGR-*et*- 'want').

(55) Ža [rok'u-n q'uq'i-x-no] [retinč'ey-no]
DEM.ABS(.I) heart.ABS.IV-and mix-IPFV.CVB-and unwillingly-and
[q'ʷarid-no Ø-oq-no-n] Ø-ik'i-x zow-s.
sad-and I-become-IPFV.CVB-and I-go-IPFV.CVB AUX.PST-PST.WIT
'He went grudgingly, against his will, and in sadness.'

[4] The idiomatic expression *rok'u q'uq'*- means 'to be reluctant'.

The imperfective converb, which is identical to or synonymous with the main predicate, can be used to express manner and/or intensity of an event. An example of such use was already presented in (1) above, where the intensity is further underscored by the use of the focus particle on the converb. Another example is shown below:

(56) ʕAraq'i ħaƛu-x ħaƛu-s nes-ä.[5]
booze.ABS.III drink-IPF.CVB drink-PST.WIT DEM.I-ERG
'He got really drunk on booze.' (lit.: he drinking drank…)

3.3 Converbal clauses expressing cause or reason

Two converbs form cause/reason clauses: the causal converb *-zaƛ'/-zaq*, which is used most commonly, and the converb *–xow/xoy*, which is quite rare.[6] Some examples:

(57) [Yedu q'ut'u teƛ-xo b-oq-zaƛ'] yiła-s
DEM jug.ABS.III give-IPF.CVB III-become-CAUSAL.I.CVB DEM.nI-GEN1
hunar-no es-o mi dä-q.
skill.ABS.III-and tell-IMPER 2SG.ERG 1SG-POSS.ESS
'Since you are selling this jug (for so much money) tell me what it does.' (Łux di yik'a yay?10)

(58) [Čot-no[7] dä-ƛ'-āy-gon b-ig b-iy-xoy]
counting-ABS.III-TOP 1SG-SUPER-ABL-CONTR.TOP III-well III-know-CAUSAL.II.CVB
magazine-y-ä Ø-ači mi.
store-OS-IN.ESS I-stay.IMPER 2SG.ABS(.I)
'Since you know how to count (counting) way better than I, you stay in the store.'
(after Imnajšvili 1963:226)

(59) Ža hoboy [*pro* ʕumru-n b-eɣur-zaƛ']

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[5] In principle, two structures could underlie this sentence; the object *ʕaraq'i* can be interpreted with either the gerund or the main predicate, thus:

(i) [pro_i ʕaraq'i$_k$ ħaƛu-x] pro_k ħaƛu-s nes-ä$_i$.
booze.ABS.III drink-IPF.CVB drink-PST.WIT DEM.I-ERG

(ii) ʕaraq'i$_k$ [pro_i pro_k ħaƛu-x] ħaƛu-s nes-ä$_i$.
booze.ABS.III drink-IPF.CVB drink-PST.WIT DEM.I-ERG

Both structures are possible in Tsez (see section 4 for more discussion), and without a more detailed analysis, including prosodic information, it is impossible to decide in favor of one or the other.

[6] This converb is presented in Imnajšvili (1963: 226), but we found very few instances of it in texts and speakers never offer it as their first choice.

[7] The word for 'counting' here is *čot*, from the Russian *ščjot.* Imnajšvili (1963) lists this word, but it is not included in Xalilov (1999). *Čot* and its variant *šot* are both accepted but do not seem to be widely used, and the word *ħisab* 'math; counting' is preferred.

DEM.ABS(.I) thus life.ABS.III-and III-make.less-CAUSAL.I.CVB
parti-łe-r Ø-oq-äsi zow-s.
party-CONT-LAT I-become-RES.PTCP be.PST-PST.WIT
'So he joined the (Communist) party because he lied about his age (lit.: made his life smaller).'

(60) Žed-ä [ža hemece Ø-eti-zaq]
DEM.IPL-ERG DEM.ABS(.I) so I-love-CAUSAL.I.CVB
ƛ'at'u-mo-ƛ'-no Ø-egir-no.
whim-OS-SUPER.ESS-and I-send-PST.nWIT
'Because they loved him they indulged his every whim (lit.: sent him up to his whim).' (Debi xarži anu yedu:3)

The form in *–zaq* (but not in –zaƛ') is found in the set phrase *yˁayˁu* AGR-*izizaq* 'being happy' (lit.: happiness rising), which is used without a noticeable causal interpretation. This use is illustrated in (61), where we also find a regular causal converbal clause with the predicate in -*zaƛ'*:

(61) [Idu-r saɣłi-ƛ' q'ˁano-n esna-bi
home-LAT health-SUPER.ESS two-COLL sibling-PL.ABS(.IPL)
b-ay-zaƛ'] [ɣˁayˁu [b-izi-zaq] eni-babiw-r
IPL-come-CAUSAL.I.CVB happiness.ABS.III IPL-rise-CAUSAL.I.CVB parents-LAT
b-iči-n] moči b-iqi-x zow-n-ānu.
III-stay-PFV.CVB place.ABS.III III-be.got-IPFV.CVB be.PST-PST.nWIT-NEG
'Because/When the brothers came home safe, their parents were so happy that they could not contain themselves.' (lit.: … happiness, as it rose, stayed with the parents, and there was no place to be obtained) (Ħasanno Ħusenno:64)

As these examples show, a typical position for causal clauses is either preceding the clause they are associated with, or center-embedded, as in (59) and (60). There is no categorical restriction against placing causal clauses after the main sentence, but such an order is not found in texts and is never offered as speakers' first choice.

Temporal converbs can also be used to express cause or reason. Consider the following example, which also illustrates that converbs can be coordinated, provided that they are associated with a single finite clause:

(62) Elo-gon č'ač'ane-ł-no [yā simindi
there-CONTR.TOP Chechnya-CONT.ESS-TOP or corn.ABS.IV
r-iƛ-a koƛ'i-nčey] [yā b-eynod-a b-iz-a
IV-cutlivate-INF know-PFV.CVB.NEG or IPL-work-INF IPL-rise-INF
koƛ'-inčey] ʕuraw qwariłi r-ay-si
know-PFV.CVB.NEG numerous hardship.ABS.IV IV-come-PST.WIT
axo-s.
stomach-GEN1
'And there, in Chechnya, because we did not know how to sow corn or how to run a household (lit.: to stand to work), we suffered a lot of hardship.'

3.4 Conditonal converbal clauses

Tsez has separate converbs for non-counterfactual (factual, predictive) and counterfactual conditional clauses. Non-counterfactual conditional clauses use the converb ending in the suffix *–näy (-nāy).* For example,

(63) [Tatanu ɣudi r-oq-näy] eli ker-ä-ɣor
warm day.ABS.IV IV-become-COND.CVB 1PL.ABS(.IPL) river-IN-VERS
esanad-a b-ik'-ān.
wash-INF IPL-go-FUT.DEF
'If it gets warm we will go swim in the river.'

Non-counterfactual conditional converbs are often found in proverbs, as shown in the examples below:

(64) [Reƛ'a ƛaƛa-näy] micxir b-āqi,
hand.ABS.IV itch-COND.CVB money.ABS.III III-become.FUT
[rori ƛaƛa-näy] huni-x Ø-āgi.
foot.ABS.III itch-COND.CVB road-AD.ESS I-stretch.FUT
'If you hand itches, you will get money; if your foot itches, you will be on the road.'

(65) [Allah-ä c'ax-inč'i-näy] ʕarada-z
God-ERG write-PST.WIT.NEG-COND.CVB cannon-GEN2
hut'-ā-r kur-no-kin Ø-äxu-nč'i.
opening-IN-ALL throw-PFV.CVB-FOC I-die.FUT-NEG
'A man does not die if he is not meant to die.' (lit.: If God does not write (it), one won't die even if they throwing one into the opening of a cannon)

(66) [Baru kec-näy] ɣˢutku-n kāc.
wife.ABS.II sleep-COND.CVB house.ABS.IV sleep.FUT
'The home of a lazy woman suffers.' (lit.: if the wife sleeps, the house will also sleep)

(67) [Zaħmatłi b-ikad-a b-et-inč'i-näy] moči
hardship.ABS.III III-see-INF III-want-NEG-COND.CVB field.ABS.III
b-iƛ-inč'ey xec.
III-plant-PFV.CVB.NEG leave.IMPER
'If you don't want to see any hardship don't start anything.' (lit.: … leave the field unplanted) (Khalilov 1999: 122)

The counterfactual conditional (glossed as CF) is expressed by the converb in *łi* or *–łiri,* where the former is probably a truncation of the latter. Compare (63) and (68):

(68) [Tatanu ɣudi r-oq-łi(ri)] eli ker-ä-ɣor
warm day.ABS.IV IV-become-COND.CVB.CF 1PL.ABS(.IPL) river-IN-VERS
esanad-a b-ik'-a zow-s.
wash-INF IPL-go-INF be.PST-PST.WIT
'If it had been warm we would have gone to swim in the river.'

The predicate of the consequent (apodosis) clause in expressions of conditional meaning does not have a special form; instead, it appears in a regular tense form (past, present, future). In counterfactual conditionals, the predicate of the consequent is typically in the past tense, consider (68) above (cf. Iatridou 2000 for the stability of the cross-linguistic generalization that counterfactuality relies on the morphology of past tense).

Although the contrast between (63) and (68) is quite clear and mirrors the difference between non-counterfactual and counterfactual conditionals in other languages, Tsez also uses the difference between the two converbs to express the likelihood of an event in the future (see Iatridou 2000 for similar cross-linguistic tendencies). If a future hypothetical event is viewed as likely, the converb in *–näy* is used, but if the prospects of an event are considered dim, the counterfactual converb is called for. Compare (69) and (70). In (69), the speaker signals his assessment that his listeners are likely to desire to hear stories, whereas in (70), the speaker views the need to marry another woman as unlikely (and undesirable).

(69) Dä-q šet'u-n b-uti-n b-iči
1SG-POSS.ESS around-and IPL-turn-PFV.CVB IPL-stay.IMPER
[[[xabar-ya-bi teqer-no] b-ič-a] r-et-äsi]
story-OS-PL.ABS.nIPL hear-PFV.CVB IPL-stay-INF IV-want-RES.PTCP
meži b-esu-näy].
2PL.ABS(.IPL) IPL-find-COND.CVB
'Stand around me if you find yourselves wanting to continue to hear stories.' (ʕAliqilič:1)

(70) [[Mi y-owa-n y-oq-inč'ey] q'ˢuya ɣˢanabi
2SG.ABS.II II-take-PFV.CVB II-be.able-PFV.CVB.NEG other woman.ABS.II
y-ow-łiri] sosi di-n ałni debe-q
II-take-COND.CVB.CF at.first 1SG.ERG-and embrace.ABS.III 2SG-POSS.ESS
b-ic'-r-er-ān.
III-fill-CAUS-CAUS-FUT.DEF
'If I could not marry you and I married a different woman I too would also have you embrace me first.' (Xanno, nesisgon łˢono užin:105)

Example (70) illustrates yet another property of conditional converbs. In this example, there is only one conditional converb, *yowłiri* 'if (I) took'; however this converbal clause also has a perfective converbal clause adjoined to it [*mi yowan yoqinč'ey*] 'unable to take you [as my wife]'.[8] This perfective converbal clause is interpreted under the scope of the conditional, and the result is that both eventualities, the inability to marry the addressee and the betrothal to a different woman, are conceptualized as hypothetical events. Such linking of converbs, where only one converb is marked as conditional but takes adjoined converbs under its scope, is the preferred option of expressing that several events are viewed as hypothetical or counterfactual. Further still, such linking is the only option if the two or more events are viewed as causally or temporally related, as is the case in (70), where the speaker is unable to marry the girl he loves and as a consequence has to marry another person. If two events are viewed as relatively independent of each other, then the corresponding conditional converbal clauses can be

[8] See CH. YY [Clausal compl] on the use of AGR-*oq*- 'be able to' as a restructuring verb that combines with perfective or imperfective converb.

conjoined, either using the coordinator *–n(o)* 'and', or by parataxis (see section 5 for further discussion of such linking). But using such converbal coordination for (70) is judged infelicitous, because the coordination of converbs leads to the perception that the two events are unrelated:

(71) #[[Mi y-owa-n y-oq-inč'i-łiri]-n q'ˤuya
2SG.ABS.II II-take-PFV.CVB II-be.able-NEG-COND.CVB.CF-and other
ɣˤanabi y-ow-łiri]-n…
woman.ABS.II II-take-COND.CVB.CF-and
('If I could not marry you, and if [unrelatedly] I married a different woman …')

Conditional clauses often although not always correspond to presupposed context; that context needs to be assumed in order to make predictions as to what happens next. This makes the antecedent clause of a conditional sentence similar to a topic/discourse-old expression, something that has been noted by a number of researchers (cf. Haiman 1978, Comrie 1986, Bhatt and Pancheva 2006, Constant 2014; see also Iatridou 2013 for criticism and alternative discussion). Conditional converbal clauses can combine with topic particles, which reinforces their topic interpretation. For example, in (72), the conditional converbal clause precedes the finite clause expressing the consequent of the respective conditional and is overtly marked as topic, which signals its discourse-old interpretation:

(72) [B-aq'ˤu micxir b-oq-näy]-ƛa, [qala-m-ä-ɣor-no
III-much/many money.ABS.III III-become-COND.I.CVB-TOP fortress-OS-IN-VERS-and
Ø-izi-n, Ø-ik'-ān di neł-dä-ɣor].
I-rise-PFV.CVB I-go-FUT.DEF 1SG.ABS(.I) DEM.nI-APUD-VERS
'If I am/were rich I would/will go up into the fortress and go to her chambers.' (K'ešonad mi, pakmos ʕabasi!:17)

However conditional clauses do not always express presupposed context and can be overtly marked with a focus particle as well, as shown in (73):

(73) [B-aq'ˤu micxir b-oq-näy]-kin, [qala-m-ä-ɣor-no
III-much/many money.ABS.III III-become-COND.I.CVB-FOC fortress-OS-IN-VERS-and
Ø-izi-n, Ø-ik'-ān di neł-dä-ɣor].
I-rise-PFV.CVB I-go-FUT.DEF 1SG.ABS(.I) DEM.nI-APUD-VERS
'Even if I were rich I would go up into the fortress and go to her chambers.' (based on K'ešonad mi, pakmos ʕabasi!:17)

In examples (72) and (73), the converbal clause precedes the finite clause; in this position, a converbal clause can be interpreted either as topic or as focus. Converbal conditional clauses that follow the finite clause are more restricted in their interpretation. Postverbal material in Tsez has a strong topic, discourse-old interpretation in general (see CH.YY [Word order] for a discussion). So if a conditional converbal clause, which expresses the conditional antecedent, follows the finite clause then that clause has to be interpreted as backgrounded, topic-like, given material. Such a postposed clause can receive overt topic marking, as shown in (74), but cannot be focused, as (75) illustrates. Example (74) would be most appropriate if the speaker's affluence

has already been under discussion; it it has not been explicitly brought up in preceding discourse, than (72) is more felicitous.

(74) [Qala-m-ä-ɣor-no Ø-izi-n, Ø-ik'-ān di neł-dä-ɣor]
fortress-OS-IN-VERS-and I-rise-PFV.CVB I-go-FUT.DEF 1SG.ABS(.I) DEM.nI-APUD-VERS
[b-aq'ˀu micxir b-oq-näy](-ƛa).
III-much/many money.ABS.III III-become-COND.I.CVB-TOP
'If I had a lot of money/If I am/were rich I would/will go up into the fortress and go to her chambers.' (based on K'ešonad mi, pakmos ˀabasi!:17)

(75) [Qala-m-ä-ɣor-no Ø-izi-n, Ø-ik'-ān di neł-dä-ɣor]
fortress-OS-IN-VERS-and I-rise-PFV.CVB I-go-FUT.DEF 1SG.ABS(.I) DEM.nI-APUD-VERS
[b-aq'ˀu micxir b-oq-näy](*-kin).
III-much/many money.ABS.III III-become-COND.I.CVB-FOC
'If I had a lot of money/If I am/were rich I would/will go up into the fortress and go to her chambers.' (based on K'ešonad mi, pakmos ˀabasi!:17)

Conditional converbal clauses can include the adverb *nagaħ*, which serves to emphasize the hypothetical nature of a given event. Outside conditionals *nagaħ* means 'suddenly; unexpectedly', but in conditional clauses its meaning is close to 'in case'. If *nagaħ* is used in a conditional clause, it has to appear at the left edge of that clause. By comparison, when it appears in other types of clauses, there are no strict constraints on its placement.[9] For instance:

(76) [Nagaħ xalq'i-mo huni-za-x (*nagaħ) ruħ-č'agoyaw
in.case people-ERG road-OS.PL-AD.ESS in.case life-living
(*nagaħ) šebin q'^{w}arid r-oy-x r-esu-näy]
in.case thing.ABS.IV sad IV-do-IPFV.CVB IV-find-COND.CVB
mi ža x^{w}asar r-od-o.
2SG.ERG DEM.ABS(.IV) rescue IV-do-IMPER
'In case you find that someone starts hurting the animals on the way, come to their rescue.' (Barkat yołäsi ħiƛ'oqu:4)

The difference between the two uses of *nagaħ* can be underscored by the fact that both forms can co-occur in a conditional, as shown below:

(77) [Nagaħ ɣudi nagaħ tatanu r-oq-näy] eli
in.case day.ABS.IV suddenly/*in.case warm IV-become-COND.CVB 1PL.ABS(.IPL)
ker-ä-ɣor esanad-a b-ik'-ān.
river-IN-VERS wash-INF IPL-go-FUT.DEF
'In case it suddenly gets warm we will go swim in the river.'

[9] One could compare the two uses of *nagaħ* with two uses of the English *once*, which can appear as a clause opener of a conditional (also at the left edge of the clause) as well as an adverb with the meaning '(for) one time'; the two can also co-occur:

(i) Once you have done that once there will be no problem understanding the process.

The expression *behizi roqnäy* (lit.: possible IV-become-COND) is used idiomatically in requests, with the meaning 'please; if possible'.

Non-counterfactual and counterfactual conditional semantics can also be expressed by a finite clause with the contrastive particle *yołi* 'however; in contrast' (from *yoł-łi*, the conditional converb of the present form of 'be'). This type of conditional is not converbal, and we discuss it in CH.YY [Coordination].

3.5 Concessive converbal clauses

The predicate of a concessive converbal clause bears the suffix *–łin*. For example:[10]

(78) [ʕomoy ħon-λ'o-r-go b-ox-ir-łin]
donkey.ABS.III mountain-SUPER-ALL-CONTR.TOP III-run-CAUS-CONCESS.CVB
iħ-ā xwari-λ'o-r b-ik'i-xosi yoł.
river-IN.ESS grass-SUPER-ALL III-go-PRES.PRT be.PRES
'A leopard cannot change its spots.' (lit.: even if you chase a donkey over to the mountains, it will come back to the river to graze grass.)

Concessive clauses can appear both before or after the clause they adjoin to. Compare (78) and (79):

(79) Howži bišʷa r-ac'-a-kin Ø-utik'-x-ānu
now food.ABS.IV IV-eat.TR-INF-FOC I-have.time-PRS-NEG
[gug-yo-q r-oq-łin].
back-OS-POSS.ESS IV-become-CONCESS.CVB
'Now I don't even have the time to eat the food although it is plentiful (lit.: is upon my back).' (Eniws esiw:75)

Concessive clauses are widely used as free-choice free relatives in correlative constructions (see CH. YY [Relative clauses]), as illustrated by the example below:

(80) As-āy c'a-bi r-äq-inč'i [dice-gon
sky-ABL star-PL.ABS.nIPL nIPL-be.got.FUT-NEG how.much-FC
Ø-ezu-n Ø-iči-łin].
I-look-PFV.CVB I-stay-CONCESS.CVB
'No matter how much you stare, you won't get stars from the sky.'

Sometimes causal converbal clauses have a use similar to concessive clauses; consider example (97) below.

3.6 Converbal clauses in expression of comparison

[10] See also example (3) above, which contains a concessive converbal clause.

Typically, comparison is expressed by noun phrases, with the standard of comparison in the super-ablative form (see Ch. YY [Adverbial phrase] and CH.YY [Adjectival phrase]). However, there are also some converbal clauses that can be used to denote the standard of comparison. Most commonly, the standard of comparison is expressed by a clause with the posterior converb as predicate. For example:

(81) [Žek'u-z raƛ'-m-ä xan-łun Ø-ači-zaƛ'or]
person-GEN2 land-OS-IN.ESS king-as I-stay-POST.CVB
dä-z-tow raƛ'-m-ä laɣ-łun r-igu dä-r.
1SG-GEN2-FOC land-OS-IN.ESS slave-as IV-good 1SG-LAT
'I would rather be a slave in my land than the king in someone else's land.' (ʕAliqilič:111)

4 Coreference across converbal clauses and word order preferences

Regardless of the type of converb, there are no restrictions on coreference between the arguments of a converbal clause and the finite clause it is adjoined to. The arguments of two or more clauses do not have to be coreferential at all, as in the following example:

(82) [Oz-e-s oz-λ'o rok'u r-ay-nč'ey]
eye-OS-GEN eye-SUPER.ESS heart.ABS.IV IV-come-PFV.CVB.NEG
pro$_{arb}$ b-oλλ'o mˁali er-no.
III-middle nose.ABS.III set-PST.NEV
'Since the eyes could not agree with each other, they put a nose in the middle.' (lit.: the eye's heart did not come on the eye…)

It is common for subjects and objects to be in a position of advantage in controlling coreference across clauses, so instances where the subject of a perfective converbal clause is coreferential with the subject of the main clause are quite common, as in (21) through (23) above; however, this does not rule out other possibilities of coreference. If a sentence includes several converbal clauses, multiple relations of coreference can be established within it. For instance, in (83), the subject of the first converbal clause, *eženi esiw* 'the older brother', is coreferential with the possessive noun phrase *nesiq* 'to him' in the clause headed by the causal converb. The causal converbal clause is embedded in the perfective converbal clause, whose understood object is coreferential with the object of the matrix clause, *cugu* 'barrel'.

(83) [Xizyo-gon Ø-ˁeže-ni esiw$_i$ Ø-ik'i-n] [[nesi-q$_i$-no
then-CONTR.TOP I-old-DEF sibling.ABS(.I) I-go-PFV.CVB DEM.I-POSS.ESS-and
šebin r-oq-inč'i-zaƛ'] q'ˁim
thing.ABS.IV IV-become-NEG-CAUSAL.I.CVB head.ABS.IV
ƛ'iyoħo-r *pro*$_j$ r-ut-ir-no] cugu$_j$ kur-no.
down-LAT IV-turn-CAUS-PFV.CVB barrel.ABS.IV throw-PST.nWIT
'Then the older brother went, and because he could not do anything (lit.: thing did not become), they turned the barrel upside down (lit.: turning the barrel down threw it).' (ʕOƛno esiwn, sis esiyn:26)

These examples already indicate that coreference is not sensitive to the form of the nominal; in (83), the absolutive in the first converbal clause is co-indexed with the poss-essive in the second, causal converbal clause. Similarly, in the next example, the lative experiencer of the converbal clause *eɣeni esiwr* 'younger brother' is coreferential with the understood ergative subject of the main clause. In addition, the head noun of the relative clause headed by the participle *bezuxosi* (from the intransitive verb AGR-*ez*^{w}- 'look') is co-indexed with the understood object of the imperfective converbal clause (*bazaryā teƛxo*), which is embedded inside the relative clause.

(84) [Ø-eɣe-ni esiw-r$_i$ [[bazar-y-ā *pro*$_k$ teƛ-xo]
I-young-DEF sibling-LAT market-OS-IN.ESS give-IPFV.CVB
b-ezu-xosi] č'ikay-n$_k$ y-ukay-n] *pro*$_i$ bazargan-qo
IPL-look.at-PRS.PTCP glass.ABS.II-and II-see-PFV.CVB merchant-POSS.ESS
esir-no…
ask-PST.nWIT
'The younger brother saw the mirror that was sold at the market and asked the merchant…' (lit.: saw the glass that people looked at as one was selling it at the market…) (Łux di yik'a yay?:18)

In the next sentence, the two perfective converbs indicate a sequence of events; the sequential reading is reinforced by the connective *–n(o)* in each of the converbal clauses. The clause chain involves the same participants, Goqi and Fox. *Goqi* is the subject in the first converbal clause, where *zirä* is inside the relative clause modifying the head noun *łinaƛ'no* 'thing' (the relative clause is shown in brackets as well). In the second converbal clause, both main participants are expressed by demonstratives, and the omitted subject in the finite clause refers to Goqi and Fox together; since Goqi is a male, the intransitive verb agrees with that omitted subject in IPL:

(85) [Goqi$_i$ [zir-ä$_k$ äƛi-ru] łina-ƛ'-no
Goqi.ABS.I fox-ERG say-PST.PTCP what-SUPER-ESS-INDEF
bužzi-n Ø-oq-no] [nes-ä$_i$ ža$_k$ idu-ɣor-no
believe-and I-become-PFV.CVB DEM.I-ERG DEM.ABS.III home-VERS-and
b-iži-n] q'ˢano-n sadaq *pro*$_{i+k}$ b-iči-x
III-lead-PFV.CVB two-COLL together IPL-stay-IPFV.CVB
zow-n.
AUX.PST-PST.nWIT
'Goqi believed what Fox said, took him home, and the two of them started living together.' (Goqin zirun:3)

All these examples confirm that anaphoric relations across the boundaries of converbal clauses are quite free. This fact, combined with the general tendency of the language to drop noun phrases both in argument and adjunct positions, results in clause chains with multiple omitted nominal expressions. The omission can take place equally in converbal and main clauses. In sum, a converbal clause can include either a null pronominal or a demonstrative coreferential with a fully specified noun phrase in a finite clause; the opposite coreference pattern, in which a noun phrase in a converbal clause is coreferential with a null pronominal or a demonstrative in a finite clause, is equally possible.

While there are no grammatical constraints on omission, we find a strong word order preference: if an overt expression and a null pronominal are co-indexed, it is more natural for the overt expression to appear first. In other words, (86a) is preferred to (86b):

(86) a. overt expression precedes null pronominal
b. null pronominal precedes overt expression

This is a manifestation of a more general dispreference for cataphora, a dispreference that Tsez shares with many other languages. Tsez also exhibits a preference for placing converbal clauses before the main clause. This is not a robust constraint (we have seen instances of the opposite order throughout this chapter), but rather a tendency. If we now combine the two tendencies (preference for anaphora over cataphora and preference for converbal-before-main clause order), two main strategies of clause linkage emerge. First, converbal clauses containing an overt noun phrase tend to be followed by main clauses containing an unexpressed coreferential noun phrase. Second, converbal clauses tend to be center-embedded (we will return to this issue in the bext section). Thus:

(87) a. [overt-expression$_i$… CONVERB] *pro*$_i$ MAIN-PREDICATE
b. overt-expression$_i$ [*pro*$_i$ CONVERB] MAIN-PREDICATE

The common occurrence of (87a) may create an impression that overt nominal expressions have to occur in converbal clauses, but this tendency is simply a side effect of the preferences discussed here.

5 Coordination or subordination?

In the examples presented in the chapter so far, we have observed clause linkages where a single finite clause combines with one or more non-finite (converbal) clauses that linearly precede, follow, or appear center-embedded in the finite clause.

A structure with a single finite verb and a series of non-finite verbs is expected to show properties of subordination — that is, the elements should be joined in such a way that one of them is dominated by the other. Such syntactic subordination is contrasted with coordination, in which two or more elements are joined in such a way that any one element could be the head of the structure, and no single element is clearly dominant. Despite this seemingly straightforward distinction and the expectation that clause chains should be instances of clausal subordination, a number of researchers, including those who work on Nakh-Dagestanian languages, have shown that the situation with clause chains is more complex. In a nutshell, the finite/non-finite distinction is not always sufficient to identify a subordinate structure, and clause chains can have either subordination-like or coordination-like properties. In other words, overt structural asymmetry, in which one of the clauses in a sentence has a non-finite predicate, may not be sufficient to rule out coordination. For Nakh-Dagestanian languages, the difficulties inherent in determining the type of linkage in clause chains are discussed by Haspelmath (1995; 2004); van den Berg (2004); Creissels (2010); Kazenin and Testelec (2004); Jeschull (2004); Forker (2013: Ch.20-22).

To distinguish between coordination and subordination, researchers have proposed a number of criteria, some of which are presented in Table 3 below (we have excluded the criteria that are inapplicable to Tsez; for a full list of criteria, see Haspelmath 1995; Kazenin and Testelec 2004; Kwon and Polinsky 2008). As we just mentioned, however, the presence of a non-finite predicate does not necessarily qualify the structure as subordinate; this suggests that the criteria listed in Table 3 may not be absolute. At best, they should be understood as a cluster of diagnostics.

Table 3. Criteria for distinguishing coordination and subordination

	Coordination	Subordination
Overt structural asymmetry (e.g., one of the clauses has a non-finite predicate)	×	✓
Coordinate structure constraint observed	✓	×
Same illocutionary force in all clauses	✓	×
Center embedding	×	✓
Backward pronominalization	×	✓
Gapping	✓	×

We will start by briefly illustrating these diagnostics using English data.

(88) *Coordinate Structure Constraint* (Ross 1967)
In a coordinate structure,
a. no conjunct may be moved,
b. nor may any element contained in a conjunct be moved out of that conjunct

The coordinate structure constraint is supposed to be inviolable within coordinate structures, as shown by the following English example, where *who* is displaced from a coordinate noun phrase:

(89) *Who$_i$ did you invite [__$_i$ and Pat]?

Nevertheless, acceptable violations of the coordinate structure constraint have long been noted for English (Ross 1967, Schmerling 1975, Goldsmith 1985, Lakoff 1986, Kehler 2002). For example, extraction out of a single conjunct can occur when *and* is paraphraseable by *nonetheless*. Consider (90), where *how much* belongs only in the first conjunct:

(90) How much$_i$ can you drink ___$_i$ and still stay sober?

Lakoff (1986) notes a similar type of case, in which the relationship between the conjuncts is construed as that of result. In such a case, *and* is paraphraseable by *and therefore* or *and as a result*. Again, the extraction is only out of the first conjunct:

(91) That's the stuff$_i$ [that the guys in the Caucasus drink __$_i$ and live to be a hundred].
(Lakoff 1986), attributed to Farley)

Note that such acceptable violations are often accompanied by a mismatch in illocutionary force; for instance, in (90), one of the clauses conjoined by *and* is declarative and the other, interrogative.

Next, center embedding is ungrammatical under coordination but acceptable in subordinate structures, as shown by the following English contrast:

(92) a. John, while everyone was talking about center embedding, fell asleep.
b. * John, and everyone was talking about center embedding, fell asleep.

Center embedding can be considered a particular subcase of a more general property separating coordination and subordination: under coordination, the respective positions of the joined clauses are generally fixed, whereas under subordination, they can be changed.

The difference between coordination and subordination is also observed in coreference relations. In (93), *she* and *Emma* can corefer, but in (94) such coreference is impossible. A pronoun, demonstrative or epithet in the first coordinate clause cannot be coreferential with a lexically specified noun phrase in the next coordinate clause:

(93) When she$_i$ leaves the house Emma$_i$ always locks the door twice.
(94) She$_i$ leaves the house and Emma$_{k/*i}$ always forgets her keys.

Finally, gapping is possible under coordination, but impossible under subordination:
(95) a. Ed will buy a Toyota and John ~~will buy~~ a Volvo
b. *Ed will buy a Toyota whereas John ~~will buy~~ a Volvo

If we now attempt to apply this cluster of properties to Tsez, we find that converbal clauses are not uniform in terms of subordination/coordination. Some converbal clauses show unequivocal properties of subordination. In particular, they allow violations of the coordinate structure constraint, do not share illocutionary force with the finite clause, can be center-embedded (see (22), (27), (28), (29), (34), (39), (41), (44), (54), (55), (59), (60), (83) above), and do not permit gapping. In sentences with such converbal clauses, a non-reprise (non-echo) question can be asked of the main clause, but not the embedded clause.

The following examples serve as further illustrations. In (96), a question is asked only of the finite clause, and the converbal clause does not share polarity with the main clause:

(96) [Maħin r-ok’-nosi] ziru-q ɣun-ä r-ˢoƛ’u-x?
tail.ABS.IV IV-hit-ANT.CVB fox-POSS.ESS tree.ABS.IV-INTERR IV-fall-PRS
‘Can the fox make the tree fall when it hits it with its tail?’ (lit.: is it the tree that falls on the fox when (it) hits (its) tail (on it))
NOT: ‘Can the fox hit the tree with its tail, and can the tree fall?’

In (97), the wh-question is asked only of the main clause. If the two clauses were coordinated, the question below would be in violation of the coordinate structure constraint:

(97) [Sadaq ʕo-n r-iž-äsi zow-zaƛ’]
together axe.ABS.IV-and IV-carry-RES.PTCP be.PST-CAUSAL.I.CVB
yaqˢuł-gon šida mi at’iw qaca
today-CONTR.TOP why 2SG.ERG wet firewood.ABS.IV

r-ay-r-ä?
IV-come-CAUS-PST.WIT.INTERR
'And today, why did you bring wet firewood? Didn't you have your axe with you?' (Onočun mamalayn: 11)

The next example shows two conditional clauses (each containing an anterior converbal clause); they are paratactically joined, and precede the main clause, which is a question (*t'ok'ow elur q'ʷˀariłi łinas?* 'from what will we have more trouble?'). Again, the polarity of the converbal clauses is different from that of the main clause:

(98) [[Ačqˀay-nosi] ža b-äk'-z-ä ħaƛ-ani-x
be.thirsty-ANT.CVB DEM.ABS(.III) III-hit-ATTR.OS-IN.ESS drink-MASD-AD.ESS
łi-n r-oƛix-näy] [[mekoy-nosi-gon] hemedur-tow
water.ABS.IV-and IV-appear-COND.CVB be.hungry-ANT.CVB-CONTR.TOP so-FOC
bišʷa-n r-iqi-näy] t'ok'ow elu-r q'ʷˀariłi
food.ABS.IV-and IV-be.got-COND.CVB more 1PL-LAT woe.ABS.IV
łina-s?
what-GEN1
'If drinking water appears where we hit it on the ground when we are thirsty and the food likewise appears when we are hungry, what else is there to worry about?' (Hibos hunar:27)

The examples below illustrate relativization out of a finite clause with the converbal clause inside that finite clause. Such relativization violates the coordinate structure constraint (88); the fact that this relativization is possible out of the finite clause, without a parallel extraction from the converbal clause, indicates that the converb and the finite clause are not coordinated.

(99) a. [ɣʷˀad-ä q'ˀʷa-q'ˀʷa-q'ˀʷa-ƛin haraƛ' b-äy-run]
crow-ERG caw-caw-caw-QUOT voice.ABS.III III-do-IMM.CVB
haqo-ƛ-äy reƛ q'ˀida-r r-ˀaƛ'u-n.
mouth-SUB-ABL meat.ABS.IV down-LAT IV-fall-PST.nWIT
'The crow began to caw, and the meat fell out of its beak.' (Ɣˀʷadin, zirun:5)

b. [[ɣʷˀad-ä q'ˀʷa-q'ˀʷa-q'ˀʷa-ƛin haraƛ' b-äy-run]
crow-ERG caw-caw-caw-QUOT voice.ABS.III III-do-IMM.CVB
haqo-ƛ-äy q'ˀida-r r-ˀäƛ'-ru] reƛ
mouth-SUB-ABL down-LAT IV-fall-PST.PTCP meat.ABS.IV
'the meat that fell out of its beak as soon as the crow began to caw'

(100) a. [Elo-si łi ħaƛu-r-näy] Ø-exu-ƛ'o-si
there-ATTR water.ABS.IV drink-CAUS.COND.CVB I-die-SUPER.ESS-ATTR
žek'u č'agu Ø-oq-xo.
person.ABS.I alive I-become-PRS
'If you make him drink the water over there, the dying person will come alive.'
(Łux di yik'a yay?:12)

b. [[elo-si łi ħaƛu-r-näy] č'agu Ø-oq-xosi]
there-ATTR water.ABS.IV drink-CAUS.COND.CVB alive I-become-PRS.PTCP
žek'u
person.ABS.I

‘the person that comes alive if he is made to drink the water over there’

Backward pronominalization of the highest argument, similar to that illustrated in the English example in (93), is fully acceptable in Tsez. In (101a), the absolutive subject in the converbal clause is expressed by a demonstrative, coreferential with a lexically specified noun phrase in the main clause (the reverse anaphoric dependency is shown in (101b)). In (102a), the highest argument in the lative is also expressed by a demonstrative, coreferential with a lexically specified noun phrase in the main clause.

(101) a. [Ža$_i$ žedu-de$_k$ igo-r Ø-ay-nosi]
DEM.ABS(.I) DEM.IPL-APUD.ESS close-LAT I-come-ANT.CVB
yisi žek’-ä$_i$ *pro*$_k$ salam teƛ-si.
DEM person-ERG greeting.ABS.III give-PST.WIT
‘Having come up to them, this man greeted them.’
b. [Žek’u$_i$ *pro*$_k$ igo-r Ø-ay-nosi] *pro*$_i$ žedu-qo-r$_k$
person.ABS.I close-LAT I-come-ANT.CVB DEM.IPL-POSS-LAT
salam teƛ-si.
greeting.ABS.III give-PST.WIT
‘The man came up to them and greeted them.’

(102) a. [Nesi-r$_i$ micxir b-esu-zaƛ’] ʕali$_i$ siskin
DEM.I-LAT money.ABS.III III-find-CAUSAL.I.CVB Ali.ABS.I anyhow
Ø-eynoy-nč’u.
I-work-PST.WIT.NEG
‘Because he found money, Ali did not work at all.’
b. [ʕali-r$_i$ micxir b-esu-zaƛ’] ža$_i$ sis-kin
Ali-LAT money.ABS.III III-find-CAUSAL.I.CVB DEM.ABS(.I) one-FOC
Ø-eynoy-nč’u.
I-work-PST.WIT.NEG
‘Because Ali found money, he did not work at all.’

Consistent properties of subordination are found in clauses with concessive, conditional, causal, terminative, anterior, immediate anterior, and posterior predicates. We can conclude that these are bona fide adverbial clauses.

Clauses with perfective, imperfective, durative, and simultaneous converbs present a more complex picture. With respect to these converbs, the following generalization emerges: if the events denoted by a converbal clause and the main clause are perceived as causally linked, the converbal clause shows all the properties of subordination: it permits center-embedding, violation of the coordinate structure constraint, and cooccurrence with a non-reprisal (non-echo) wh-word in the main clause. If, however, the two events are viewed as parallel and unrelated to each other, the converbal clause shows all the properties of a coordinate conjunct, with the exception of the finite marking on the verb.

In principle, it is almost always possible to construe a connection between events, so the real test of the proposed generalization comes from those instances where the link between the two events is explicitly canceled. Consider a situation where one person is laughing and the other is crying;

the situation is inherently ambiguous, as the two events are unrelated, but may be connected. The following sentence can be understood either to mean that Fatima is upset at Ayshat, or that Fatima is crying for another reason (or for no reason whatsoever):

(103) [Ayšat qoqoλ-äsi y-oq-ƛ'o] pat'i ʕiya-xosi
Ayshat.ABS.II laugh-RES.PTCP II-become-SIM.CVB Fatima.ABS.II cry-PRS.PTCP
(yoł).
be.PRS
'Ayshat is laughing and Fatima is crying.' (ambiguous)

If a clause with the simultaneous converb is embedded in the main clause, the causal link between the two events is emphasized; the interpretation that Fatima is crying for no reason or for reasons that have nothing to do with Ayshat is rejected.

(104) Pat'i [Ayšat qoqoλ-äsi y-oq-ƛ'o]
Fatima.ABS.II Ayshat.ABS.II laugh-RES.PTCP II-become-SIM.CVB
ʕiya-xosi (yoł).
cry-PRS.PTCP be.PRS
'Fatima is crying as (because) Ayshat is laughing.'
NOT: 'Fatima happens to be crying while Ayshat is laughing.'

The causal interpretation is also enforced if the converbal clause appears after the finite clause, as shown below. Recall that subordination is often associated with greater positional flexibility of the embedded clause in relation to the matrix clause.

(105) Pat'i ʕiya-xosi (yoł) [Ayšat qoqoλ-äsi y-oq-no].
Fatima.ABS.II cry-PRS.PTCP be.PRS Ayshat.ABS.II laugh-RES.PTCP II-become-PGV.CVB
'Fatima is crying as (because) Ayshat is/was laughing.'
NOT: 'Fatima happens to be crying and Ayshat is/was laughing.'

However, if the main clause contains an overt rejection of any connection between the two events, the two clauses need to be encoded as structurally parallel. In (106), the causal link between the two events is explicitly canceled, and the events expressed in these two clauses can only be construed as parallel. As a result, the converbal clause can no longer be treated as subordinate, which in turn rules out center embedding and violations of the coordinate structure constraint:

(106) *Pat'i [Ayšat qoqoλ-äsi y-oq-ƛ'o]
Fatima.ABS.II Ayshat.ABS.II laugh-RES.PTCP II-become-SIM.CVB
endurtow/bahana-tow ānu-si ʕiya-xosi (yoł).
simply/reason-FOC be.PRS.NEG-ATTR cry-PRS.PTCP be.PRS
('Fatima is crying for no reason and Ayshat is laughing.')

(107) *[[Ayšat qoqoλ-äsi y-oq-ƛ'o] endurtow/
Ayshat.ABS.II laugh-RES.PTCP II-become-SIM.CVB simply
bahana-tow ānu-si ʕiya-xosi] kid
reason-FOC be.PRS.NEG-ATTR cry-PRS.PTCP girl.ABS.II

("the girl that is crying for no reason and Ayshat is laughing")

These facts, achieved through targeted elicitations, support the generalization above. To recapitulate, if two events are construed as unrelated, the structural relationship between the converbal construction and the main clause shows coordinate structure properties (with the exception of the converbal–finite distinction). If two events are viewed as related, the converbal clause has the properties of a subordinate (adjoined) structure. The overall generalization bears a striking similarity to the set of principles proposed by Kazenin and Testelec (2004).

When two events are construed as unrelated, we also observe the omission of the converb (gapping), as shown below. This type of omission is generally quite rare in Tsez, and is primarily observed with imperfective converbs, as in (108) and (109).[11]

(108) [Dey eniw ʕaƛ-ä ~~y-iči-x~~] ʕali-s
1SG.GEN1 mother.ABS.II village-IN.ESS II-stay-IPFV.CVB Ali-GEN1
babiw šaħar-y-ä Ø-iči-xosi yoł.
father.ABS.I city-OS-IN.ESS I-stay-PRS.PTCP be.PRS
'My mother lives in the village, and Ali's father, in the city.'

(109) Eƛ'i-si riƛu žek'u-s ~~r-iči-xosi~~ žiƛbo-si
last.year-ATTR field.ABS.IV person-GEN1 IV-stay-PRS.PTCP this.year-ATTR
~~riƛu~~ q'ʕim-e-s r-iči-xosi (yoł).
field.ABS.IV self-OS-GEN1 IV-stay-PRS.PTCP be.PRS
'One ploughs last year's field for someone else, and this year's field, for oneself.'
(Ečruni žek'un, ʕoloqanawni užin:29)

The omission only works one way — omission of the converb — and therefore constitutes what is called "backward gapping." Forward gapping, with the omission of the main verb, is completely ungrammatical:

(110) *[Dey eniw ʕaƛ-ä y-iči-x] ʕali-s
1SG.GEN1 mother.ABS.II village-IN.ESS II-stay-IPFV.CVB Ali-GEN1
babiw šaħar-y-ä ~~Ø-iči-xosi yoł~~.
father.ABS.I city-OS-IN.ESS I-stay-PRS.PTCP be.PRS
('My mother lives in the village, and Ali's father, in the city.')

---

[11] If speakers are offered a structure with gapping and asked to reinstate the missing verb, they always include the imperfective converb as well. In support of the general tendency to avoid gapping altogether, Testelec (1997:264) presents the following example (we modify his transcription and glossing for consistency with ours):

(i) Q'ʕida Ø-āči-ru Maħama *(yoł), hečk'er
down I-stay-PST.PTCP Mohammed.ABS.I be.PRS standing
Ø-āči-ru ʕali yoł.
I-stay-PST.PTCP Ali.ABS.I be.PRS
'Mohammed is sitting and Ali is standing.'

One could question whether (108) or (109) are actually instances of converb omission. In principle, one could analyze these examples as instances of right node raising, where the two conjoined constituents simply share the verb, as shown in (111) (cf. Hartmann 2000; Johannessen 1998, a.o.). However, such verb sharing is not attested otherwise in Tsez. Furthermore, if the verb were shared, it should be possible to see resolved agreement in IPL gender (see CH. YY [Agreement]), but such agreement is completely ungrammatical in (111):

(111) [Dey eniw ʕaƛ-ä]
1SG.GEN1 mother.ABS.II village-IN.ESS
[ʕali-s babiw šaħar-y-ä]
Ali-GEN1 father.ABS.I city-OS-IN.ESS
Ø-ači-xosi/*b-ači-xosi yoł.
I-stay-PRS.PTCP/IPL-stay-PRS.PTCP be.PRS
'My mother lives in the village, Ali's father, in the city.'

Thus, sentences with perfective, imperfective, durative, and simultaneous converbal clauses can show either properties of coordination or properties of subordination. Researchers have tried to account for the unexpected mix of coordination and subordination properties in terms of a mismatch between semantic and syntactic clause linkage types (Culicover and Jackendoff 1997), a continuum between coordination and subordination (Foley and Van Valin 1984), and an appeal to structural ambiguity (Goodall 1987; Kazenin and Testelec 2004; Kwon and Polinsky 2008). If structural ambiguity is assumed, the choice between coordination and subordination is determined on semantic grounds (Na and Huck 1992, Kehler 2002). The structural ambiguity approach, in which a semantically or pragmatically determined choice between subordination and coordination is offered, is effective when applied to sentences such as (103) in Tsez.

Converbal–main clause combinations such as (103) either manifest all the properties associated with coordination or all the properties associated with subordination (see Table 3). We have not observed in-between cases indicative of a continuum, as has been described for other languages. In other words, the properties associated with sentences such as (104) and (106) are internally consistent. This fact, in turn, suggests that there is a regular correspondence between the semantic connection between two clauses and the structural representation of that linkage.

We can now revisit the converbs presented in Table 1 and update the list to include the data on (i) co-occurrence with the distributive suffix *–t'a,* and (ii) the way in which a given converb is linked to the main clause: via coordination or via subordination.

Table 4. Tsez converbal clauses and their main properties

Converb	**Suffix**	**Occurs in the negative form**	**Combines with distributive *-t'a***	**Linked to finite clause via**
Perfective	-n(o)	Yes	No	Subordination/Coordination
Imperfective	-x(o)	No	Yes	Subordination/Coordination
Anterior	-nosi	Yes	No	Subordination

Immediate anterior	-run	Yes	No	Subordination
Simultaneous	-ƛ’(o)	No	No	Subordination/Coordination
Durative I	-ƛ’orey	No	No	Subordination/Coordination
Durative II	-zey	No	No	Subordination/Coordination
Posterior	-zaƛ’or	Yes	No	Subordination
Terminative	-ace	No	Yes	Subordination
Causal I	-zaƛ’/-zaq	Yes	No	Subordination
Causal II	-xoy	Yes	No	Subordination
Conditional, realis	-näy	Yes	No	Subordination
Conditional, irrealis	-łi/- łiri	Yes	No	Subordination
Concessive	-łin	Yes	No	Subordination

6 Masdar and infinitival clauses as purpose clauses

Masdar and infinitival clauses appear as complements of control clauses (see CH. YY [Complement Clauses]) and as relative clauses, also with a purposive interpretation (see CH.YY [Relative clauses]). These clauses are thus consistently used to express purpose and goal, and their appearance as adverbial purpose clauses is yet another manifestation of that general meaning. Infinitival and masdar purpose clauses are often observed in sentences where the main predicate is a verb of motion or existence, but they are not limited to those possibilities.

In examples (112) through (116), we observe infinitival clauses denoting purpose. As example(116) shows, the subject of the purpose clause can be different from the subject of the main clause.

(112) Meži łˤono-n-tow [esir-a] dä-de-r nex-łin…
2SG.ABS three-COLL-FOC ask-INF 1SG-APUD-LAT come-CONCESS.CVB
‘Although all three of you come here in order to ask me to marry (one of you)…’ (Łux di yik’a yay?:5)

(113) [Šebin r-oɣʷ-a] hor-o
thing.ABS.IV IV-pull-INF come-IMPER
‘Come pull this out.’ (Yizałäy hič’č’a ixiw šebi yoł?:8)

(114) Q’ˤano-n es-na-bi [č’ʷad-m-āy micxir b-ow-a]
two-COLL sibling-PL-PL.ABS(IPL) ruins-OS-IN.ABL money.ABS.III III-take-INF
b-ik’i-n.
IPL-go-PST.nWIT
‘The two brothers went to take money from the ruins’ (Λelä bečed adiru miskin žek’u:27)

(115) Nesi-s uži-bi b-ik’i-n… .
DEM.I-GEN1 boy-PL-ABS.IPL IPL-go-PST.nWIT
[babiw-s irsi žedä žedu-ƛ biƛ’zi b-od-a].
father-GEN1 inheritance.ABS.III REFL.IPL-SUB.ESS divide III-do-INF
‘The sons went in order to divide their father’s inheritance.’

(Xanno, nesisgon łˤono užin:7)

(116) [Už-ä ʕelmu t’et’r-a] babiw dibir-qo
boy-ERG science.ABS.III study-INF father.ABS.I mullah-POSS.ESS
ʕaq’lu esir-si.
advice.ABS.III ask-PST.WIT
‘In order for the boy to study science, his father asked the mullah for advice.’

Masdar clauses are used more often than infinitival clauses to express purpose, perhaps because of the subtle interpretive differences between these two non-finite forms: masdars generally have a more salient interpretation of goal (see also CH. YY [Clausal complements]). Masdar purpose clauses are illustrated in the following examples. As with control complements, masdar clauses cannot appear without case marking, and the most common marking is that of ad-essive or lative:

(117) [Riya r-od-anix-gon] nesi-s hibo-n b-is-no
mark.ABS.IV IV-do-MASD-AD.ESS DEM.I-GEN1 stick.ABS.III III-take-PFV.CVB
dä-qo-r b-a.
1SG-POSS-LAT III-bring.IMPER
‘Bring me his stick so that I could make a mark on it.’ (Qˤay:26)

(118) [At’ r-ac’-ani-r] qˤ’ano-n aɣi
wheat.ABS.IV IV-eat.TR-MASD-LAT two-COLL vbird.ABS.III
oc-ä-r b-ay-n.
threshing,floor-IN-LAT III-come-PST.nWIT
‘Two birds came to the threshing floor going to peck (lit.: eat) the wheat.’ (based on Qˤay:68)

(119) Nes-ä qˤirič’ neła-z meži-ƛ
DEM.I-ERG scissors.ABS.IV DEM.nI-GEN2 bedding-SUB.ESS
r-uqˤ-si [neł-ƛ’o-r r-ut-ir-ani-ƛ-äy].
IV-hide-PST.WIT DEM.nI-SUPER-LAT IV-turn-CAUS-MASD-SUB-ABL
‘He hid the scissors under her mattress so that they would suspect her (lit.: turn it upon her).’ (based on Bilq’isdi:78)

In infinitival or masdar purpose clauses, the predicate can optionally combine with the quotative marker -*ƛin*, as for example in (120) and (121), where we use parentheses to indicate the optional status of this marker.[12]

(120) Dibir-ä Q’urʔan y-uqi-n [ƛirba-qo-r
mullah-ERG Quran.ABS.II II-close-PST.nWIT guest-POSS-LAT
hiq’i=baq’i r-od-ani-x-(ƛin)].
greetings.ABS.nIPL nIPL-do-MASD-AD.ESS-QUOT
‘The mullah closed the Quran so that that he could chat with the guest (lit.: do greetings).’ (Bilq’isdi:51)

(121) Žed-ä ža [q’ač’azi y-od-a-(ƛin)] el-āy

[12] This use of the quotative marker is also observed with infinitival/masdar complements of control clauses, but never with infinitival/masdar relative clauses (see CJ. YY[COMPL CL] and CH. YY[RCs]).

DEM.IPL-ERG DEM.ABS(.II) repair II-do-INF-QUOT here-ABL
xizo-r y-egär.
back-LAT II-send.FUT
'They will send it (the box) back so that it can be repaired.' (based on K'ešonad mi, pakmos ʕabasi!:46)

In addition, the quotative marker appears on purpose clauses with the predicate in the definite future form, as illustrated in example (2), which we repeat below. The purpose clause *biqirānƛin* is adjoined to the converbal clause *neł̄ä reƛ'a regirnosi* 'she reached with her hand'. Such purpose clauses cannot appear without the quotative marker:

(122) [[B-iqir-ān-*(ƛin)] neł-ä reƛ'a r-egir-nosi-gon]
III-catch-FUT.DEF-QUOT DEM.nI-ERG hand.ABS.IV IV-send-ANT.CVB-CONTR.TOP
t'umi b-oxi-n el-āy…
pigeon.ABS.III III-fly-PST.nWIT there-ABL
'As she reached with her hand (lit.: when she sent her hand) to catch it, the pigeon flew away…' (based on Moƛu:67)

A similar use of the quotative in purpose clauses is observed in Hinuq, where it also appears with infinitival/masdar clauses and with the intentional future, which is a close equivalent to the Tsez future definite (see Forker 2013: 617-619).

7 Adverbial clauses with a participial predicate

Adverbial clauses that take a participle as predicate are not typical, but resultatives or present participles denoting an event/state concomitant with the main event are common. In that use, participles form manner or depictive adverbial clauses. For example:

(123) [Mekod-äsi-n akił-äsi-n tatu
be.hungry-RES.PTCP-and be.tired-RES.PTCP-and strength.ABS.III
b-ex-äsi-n] yeda elo teł-xo-r Ø- ik'i-n.
III-die-RES.PTCP-and DEM.I.ABS there inside-AD-LAT I-go-PST.nWIT
'Hungry, tired, and with no energy left, he went in there.' (ʕAliqilič:167)

(124) ʕiyay-x-tow ʕiyay-xosi idu-ɣor y-ay-s kid.
cry-IPFV.CVB-FOC cry-PRS. PTCP home-VERS II-come-PST.WIT girl.ABS.II
'The girl came home crying unconsolably.'

In summary, Tsez uses its rich converbal system to express the majority of adverbial clauses, primarily temporal, manner, concessive, conditional, and causal clauses. Purpose clauses are different from the rest of the adverbial clauses because their predicates are typically masdars or infinitives. By way of summary, we present the main mappings between adverbial clause types and the mode of their expression in Tsez.

Table 5. Adverbial clauses and their mode of expression

Adverbial clause type by meaning	**Mode of expression**
Temporal	Clauses with temporal converbs, primary and specialized
Manner	Perfective converbal clause; imperfective converbal clause; participial clause
Cause/reason	Clauses with causal adverbs; perfective converbal clause
Purpose	Clauses with masdar or infinitival predicate
Conditional	Clauses with conditional converbs
Concessive	Clauses with concessive converbs
Comparative	Clauses with posterior converb

The linking of finite clauses

In this chapter, we will consider sentences composed of two or more finite clauses. Such sentences are instances of clausal coordination, with or without an overt conjunction.

For coordination of noun phrases, see CH. YY [Noun phrase]; for coordination of clausal complements, see Ch. YY [Clausal complements], and for coordination vs. subordination of converbal clauses, see CH. YY [Adverbial clauses]. Coordination of finite clauses is on the rise in Tsez, probably under the influence of Russian, but it would be incorrect to attribute all of Tsez clausal coordination to that influence. An examination of older texts, including those in Imnajšvili (1963), shows that some coordination was present in the language even before Russian influence became such a significant factor. Asyndetic (paratactic) coordination is particularly prominent. This type of coordination is available for declarative, imperative, and interrogative clauses.

1 Asyndetic (paratactic) coordination

The following example illustrates asyndetic coordination of declarative clauses. In the first clause, the absolutive noun phrase *ɣˢutkabi* 'houses' appears in the right periphery; the presence of the absolutive in this position unambiguously identifies the clause as finite, since embedded clauses are strictly verb-final. The subject of the first clause is coreferential with the omitted subject of the second clause:[1]

(1) [Q'ˢuna-n es-na-z-ä$_i$ r-igu-t'a r-odi-n
two-OS-COLL sibling-PL-PL.OS-ERG nIPL-good-DISTR nIPL-do-PST.nWIT
ɣˢutka-bi-n], [paraxat ʕumru b-odi-x
house-PL.ABS.nIPL-and restful life.ABS.III III-do-IPFV.CVB
pro$_i$ b-iči-n].
IPL-stay-PST.nWIT
'The two brothers built nice homes and led a quiet life.' (Miλ'i:72)

In (1), the absolutive noun phrase at the end of the first finite clause appears with the enclitic *–n(o)*, which reinforces the link between this clause and the next one. Recall that *–n(o)* often appears on the immediately preverbal constituent of converbal clauses (CH. YY [Adverbial clauses]) to indicate clause linkage. When finite clauses are coordinated, *–n(o)* either appears on the very last constituent of the first clause (as in (1)), or, if the clause is verb-final, on the immediately preverbal constituent, as in the example below:

(2) [Dey žuka qizan-no ānu], [dā-r kamuraw
1SG.GEN1 bad family.ABS.III-and be.PRS.NEG 1SG-LAT lacking
šebin ānu].
thing.ABS.IV be.PRS.NEG
'I have a good family and I lack for nothing.'

[1] Throughout this chapter, we indicate the boundaries of conjoined finite clauses in brackets. Unless necessary for our discussion, we do not mark converbal clauses that may appear internal to finite clauses.

Two or more imperative clauses can be coordinated asyndetically, as in example (3) below, but such coordinate imperatives are dispreferred. Instead, speakers use a converbal clause adjoined to a finite imperative clause, as in (4):

(3) [Debe-r r-äti-z-ä Ø-ik'], [ʕumru b-od-o].
2SG-LAT IV-like-ATTR.OS-IN.ESS I-go.IMPER life.ABS.III III-do-IMPER
'Go wherever you like and live (there).'
(4) [[Debe-r r-äti-z-ä Ø-ik'i-n] ʕumru b-od-o].
2SG-LAT IV-like-ATTR.OS-IN.ESS I-go-PFV.CVB life.ABS.III III-do-IMPER
'Go wherever you like and live (there).' (Λelä bečed adiru miskin žek'u:8)

Declarative and imperative clauses can be coordinated asyndetically, as in the example below. In such coordinations, there is often an implicit causal link between the event expressed in the declarative clause and the event expressed by the imperative, and the order is typically declarative-before-imperative. [2]

(5) a. [Mi di saɣ y-oy-s], [dä-x hor-o].
2SG.ABS(.II) 1SG.ERG cure II-do-PST.WIT 1SG-AD.ESS come-IMPER
'I brought you back to health, so now marry me!' (Łux di yik'a yay?:31)
b. ??[Dä-x hor-o], [mi di saɣ y-oy-s].
1SG-AD.ESS come-IMPER 2SG.ABS(.II) 1SG.ERG cure II-do-PST.WIT
INTENDED: 'Marry me, because I brought you back to health.'

Examples (6) through (8) illustrate the coordination of interrogative clauses; in (6) and (8), the interrogative suffixes are expressed in each clause, but in (7) they are omitted; this omission occurs frequently regardless of coordination (see CH. YY [Interrogatives]).[3]

(6) [Debe-r di y-eti-x-ä], [mi di
2SG-LAT 1SG.ABS(.II) II-love-PRS-INTERR 2SG.ERG 1SG.ABS(.II)
y-ow-a yoł-ä]?
II-take-INF be.PRS-INTERR
'Do you love me, will you marry me?' (Qacis gulu:11)
(7) [Šebi mež-ār r-oq-äsi], [łina-q meži ʕiyay-x]?
what.ABS.IV 2PL-LAT IV-become-RES.PTCP what-POSS.ESS 2PL.ABS cry-PRS
'What happened to you, why (on account of what) are you crying?' (ʕAliqilič:90)

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[2] It is more typical for an imperative clause to have an adjoined converbal clause; compare the following paraphrase of (5a) and see Ch. YY [Adverbial clauses] for more discussion.

(i) [Mi di saɣ y-oy-no] [dä-x hor-o].
2SG.ABS(.II) 1SG.ERG cure II-do-PFV.CVB 1SG-AD.ESS come-IMPER
'I brought you back to health, marry me!' (lit.: Me having brought you back to health, marry me)

[3] Note the postverbal material in each of the finite questions in (8).

The question in (8) is interpreted as an alternative question, but this is alternative interpretation is pragmatically inferred; it is not encoded in any special way in the clause:

(8) [Mi debez xalq'i-mo-ƛ'-ä bužzi Ø-āq],
2SG.ABS(.I) 2SG-GEN2 people-OS-SUPER.ESS-INTERR believe I-become.FUT
[aq'iw maħ yoł-äsi ensi žek'u-ƛ'-ä
strange smell.ABS.III be.PRS-RES.PTCP DEM person-SUPER.ESS-INTERR
bužzi Ø-āq]?
believe I-become.FUT
'Are you going to believe your people or are you going to believe this man who smells of foreign lands?' (ʕAliqilič:102)

If clauses connected asyndetically express events that are viewed as divergent or contrastive, the second clause can include the "viewpoint" adverbial *hudun* 'still, nevertheless'. For example:

(9) [Mežu-r-no r-iy-x], [ža hudun di mežu-ł-äy
2PL-LAT-TOP IV-know-PRS DEM.ABS(.IV) nevertheless 1SG.ABS.II 2PL-CONT-ABL
side-r gurow y-äq-inč'i].
one-LAT except II-become.FUT-NEG
'You know this; no matter what, I will belong to only one of you.' (Łux di yik'a yay?:5)

Sentences with *hudun* thus resemble sentences linked by the conjunction *amma* (see section 2), and speakers often use them interchangeably, however, *hudun* is an adverb, not a conjunction and can occur in unconnected clauses just as well, as in the following example where *hudun* appears as a regular adverb inside an adjunct clause:

(10) Zir-ä hudun zey muk'ur-no b-odi-n,
fox-ERG nevertheless bear.ABS.III concurring-and III-do-PFV.CVB
q'ʕano-n žedu hunix r-oq-no.
two-ADD DEM.ABS.(nIPL) road-AD.ESS nIPL-become-PST.nWIT
'Even so the fox managed to convince the bear, and the two of them got going.' (Zirun zeyn:41)

It is not always possible to tell the difference between, on the one hand, two separate finite clauses, one of which includes *hudun,* and, on the other hand, a pair of conjoined clauses with *hudun,* without assessing their prosody, so text examples may be ambiguous. Prosodically, a separate finite clause preceding the clause with *hudun* has a more pronounced falling contour than the first of a pair of conjoined clauses. Further differences may arise based on coreference rules discussed in section 4.

2 Syndetic coordination

The main coordinating conjunctions are *amma* 'but' and *ya… ya* (variant *yagi.. yagi*) 'either or'. The use of *amma* is illustrated in the following example; note that both clauses are clearly finite, with a noun phrase in the postverbal domain in each clause:

(11) [ħumukuli-ƛa b-ukay-nč'u elu-r] amma [neła-s
camel-INDEF III-see-PST.WIT.NEG 1PL-LAT but DEM.nI-GEN1
sipat debe-q es-ān el-ä].
appearance.ABS.III 2SG-POSS.ESS tell-FUT.DEF 1PL-ERG
'We have not seen a camel but we can describe its appearance to you.' (Xanno, nesisgon łˤono užin:28)

The use of *ya… ya* (variant *yagi.. yagi*) is observed in disjunctive sentences; occasionally only one of the two elements of this complex conjunction is expressed.

(12) Dice-gon bar-ä eƛi-łin
how.much-CONTR wife-ERG say-CONCESS.CVB
ya [*pro*$_i$ qaca r-et'ur-xo zow-n-ānu]
or firewood.ABS.IV IV-pluck-IPFV.CVB be.PST-PST.nWIT-NEG
ya [*pro*$_i$ łi r-ow-a Ø-ik'i-x zow-n-ānu]
or water.ABS.IV IV-bring-INF I-go-IPFV.CVB be.PST-PST.nWIT-NEG
ya [*pro*$_i$ q'ˤuya idu-zo ħalt'-o-qo-r Ø-uti-n
or other home-ATTR.OS work-OS-POSS-LAT I-turn-PFV.CVB
Ø-ezu-x zow-n-ānu].
I-look-IPFV.CVB be.PST-PST.nWIT-NEG
'No matter what his wife said, (he) neither chopped firewood, nor brought water, nor bothered to do any other housework.' (Hibos hunar:9)

The two variants of the disjunctive conjunction can also be mixed, as in the example below, where the first question has *ya*, and the second, *yagi*. This example instantiates a particularly common use of *ya… ya* as a linker between two or more interrogative clauses (compare a similar question with asyndetic coordination in (8) above):

(13) Ya [di b-odi-xosi adab=ħurmat-ä debe-z
or 1SG.ERG III-do-PRS.PTCP respect.ABS.III-INTERR 2SG-GEN2
rok'-e-r ʕeze b-oq-inč'u] yagi
heart-OS-LAT enough III-become-PST.WIT.NEG or
[dä-z halmaɣ-z-ä debe-r rok'-e-r r-eti-x-ānu-si
1SG-GEN2 friend-PL.OS-ERG 2SG-LAT heart-OS-LAT IV-like-PST-NEG-ATTR
šebin-ä r-od-ä]?
thing.ABS.IV-INTERR IV-do-PST.WIT.INTERR
'Do you not feel I am giving you enough respect, or did my friends do something that was not to your liking?' (Ražbadinno, Tawadin:82)

Next, two finite clauses can be joined using the complex expression *šidaƛin eƛiłi/eƛiłiri*, which is morphologically decomposed as follows:

(14) šida-ƛin eƛi-łi(ri)
why-QUOT say-COND.CVB.IRR
'if I/one were to say why'

This expression is used in the meaning of ‘because; the reason being’; for instance:

(15) [Debi-n kid-ba-bi neła-r howži ħaram
1SG.GEN1-and girl-PL.OS-PL.ABS.NIPL DEM.nI-LAT now forbidden
r-oq-si], [šidaƛin=eƛiłi ža aždaħ b-exu-r-si].
nIPL-become-PST.WIT because DEM dragon.ABS.III III-die-CAUS-PST.WIT
‘The dragon won’t get my daughters anymore because the dragon was killed.’
(ʕAliqilič:97)

(16) [Di sabaw-ya-bi-n cax-xosi ānu],
1SG.ERG talisman-OS-PL.ABS.nIPL-TOP write-PRS.PTCP be.PS.NEG
[šidaƛin=eƛiłiri šayt’an-z-ä dä-r ʕaq’uba neƛ-xo],
because devil-PL.OS-ERG 1SG-LAT torment.ABS.III give-PRS
amma [dey nesi-r-si sis daru yoł].
but 1SG.GEN1 DEM.I-LAT-ATTR one medicine.ABS.III be.PRS
‘I don’t create talismans because demons would torture me (for doing that) but I have a potion against him.’ (Riynoxu:25)

Although we show *šidaƛin eƛiłiri* as part of one of the conjoined clauses, we hypothesize that it may be in the process of developing into a conjunction. Unlike *hudun*, it cannot be used adverbially and seems to be limited to its syndetic function.

3 The particle -*yołi* in finite clause coordination

In a special case of finite clause linkage, one of the finite clauses has its predicate marked with the enclitic particle –*yołi*. The clause with –*yołi* serves as the antecedent (protasis) of the conditional, and the other finite clause expresses the consequent (apodosis). We can represent this structure schematically as follows:

(17) [… Finite Predicate-*yołi*] […. Finite Predicate]
ANTECEDENT (PROTASIS) CONSEQUENT (APODOSIS)

The particle -*yołi* is probably a contraction of *yoł-łi* ‘be.PRS-COND.CVB’, literally meaning ‘if it was/were’. It is widely used as a marker of contrastive topics, including but not limited to topics that can be marked by *as for* (Gundel 1974, 1985; Reinhart 1981; see Constant 2014: Ch. 1, for a helpful discussion of the terminology). In that particular use, -*yołi* does not combine with finite verbs, and the details of that use are presented in CH. YY [Particles]. For the current discussion, we will concentrate on cases where –*yołi* appears on finite predicates, as indicated in the schematics in (17) and as shown in (18a) and (19a).

A comparison between examples (a) and (b) in (18) (19) shows that only the examples with -*yołi* have a clear conditional interpretation. The parallel examples without that particle can be interpreted as paratactic coordinations, but the cause-effect connection between the two clauses is absent (it can of course be inferred, in an optional way), and the hypothetical reading of the events is also missing. Thus, the conditional interpretation is dependent on the presence of -*yołi*; placing the particle on a finite verb makes that a conditional, and the absence of the particle does not allow for a conditional interpretation.

(18) a. [Dä-z č'ikay-ä mi y-uk-ar-si-yoɫi]
1SG-GEN2 mirror-ERG 2SG.ABS(.II) II-see-CAUS-PST.WIT-COND
[di mi y-ow-s].
1SG.ERG 2SG.ABS(.II) II-take-PST.WIT
'If my mirror had shown you, I would have married you.'
b. [Dä-z č'ikay-ä mi y-uk-ar-si],
1SG-GEN2 mirror-ERG 2SG.ABS(.II) II-see-CAUS-PST.WIT
[di mi y-ow-s].
1SG.ERG 2SG.ABS(.II) II-take-PST.WIT
'My mirror showed you; I married you.'

(19) a. [Dä-z č'ikay-ä mi y-uk-ar-xo-yoɫi]
1SG-GEN2 mirror-ERG 2SG.ABS(.II) II-see-CAUS-PRST-COND
[di mi y-ow-ān].
1SG.ERG 2SG.ABS(.II) II-take-FUT.DEF
'If my mirror shows/showed you, I will/would marry you.'
b. [Dä-z č'ikay-ä mi y-uk-ar-xo].
1SG-GEN2 mirror-ERG 2SG.ABS(.II) II-see-CAUS-PST.WIT
[di mi y-ow-ān].
1SG.ERG 2SG.ABS(.II) II-take-FUT.DEF
'Mirror shows you; I will marry you.'

The particle *–yoɫi* can co-occur with finite predicates in different tenses. Depending on the tense of the predicate marked with *–yoɫi* and the tense of the predicate in the consequent, the conditional can be interpreted as referring to the past, present, or future. For instance, in the example below, the predicates in the consequent appears in the future tense, and the sentence can be interpreted as either counterfactual (i) or hypothetical (ii):

(20) [Dow-qo-r b-eč'-no b-igu hibo neƛ-si-yoɫi],
2SG-POSS-LAT III-cut-PFV.CVB III-good stick.ABS.III give-PST.WIT-COND
[neɫ-ä-n ʕuraw b-igu kumak b-ädi].
DEM.nI-ERG-and enough III-good help.ABS.III III-do.FUT
(i) 'If they had cut out and given you a good stick it would also have been of great help.'
(ii) 'If they cut out and gave you a good stick it would/will also be of great help.'
(Ečruni žek'un, ʕoloqanawni užin:25)

In the following example, the predicate of the consequent is in the past tense, and the sentence has to be interpreted as counterfactual:

(21) [Q'ˤog-ce bix eqer-si-yoɫi q'ˤida
armful-EQUAT hay.ABS.IV put-PST.WIT-COND down
Ø-äči-z-ä] [kokoru qˤiƛci r-oq-xosi
I-stay-ATTR.OS-IN.ESS soft cushion.ABS.IV IV-become-PRS.PTCP
zow-s].
be.PST-PST.WIT
(i) 'If one had put an armful of hay at the place where (I) sat, that would have made for a soft cushion.' (Ečruni žek'un, ʕoloqanawni užin:23)

NOT: (ii) 'If one had put an armful of hay at the place where (I) sit, that would/will make for a soft cushion.'

The marking of topic and conditional by the same exponent is not unique to Tsez; such marking has been noted in several other languages, Turkish in particular (Haiman 1978).

> "The most immediate connection between the syntactic categories of topic and conditional is manifested in those languages where the regular mark of the conditional is also the regular mark of the topic. I know of two languages where this identity holds. If the analysis of topics defended here is accurate, there are doubtless others ... One such language is Turkish, where the conditional suffix -sA, suffixed to an NP, establishes it as a contrastive topic." – (Haiman 1978: 577)

Just as *-yoł̄i*, the Turkish *–sA* combines with a tensed predicate; moreover, it can be followed by agreement morphology. Haiman suggests that that there is a deep similarity between conditionals and topics, and he gives the following definitions for the two to bring out their parallels:

(22) "A conditional clause is (perhaps only hypothetically) a part of the knowledge shared by the speaker and his listener. As such, it constitutes the framework which has been selected for the following discourse." (Haiman 1978: 583)
(23) "The topic represents an entity whose existence is agreed upon by the speaker and his audience. As such, it constitutes the framework which has been selected for the following discourse." (Haiman 1978: 585)

Not all conditional antecedents can be interpreted as topics or as discourse-old material, but *-yoł̄i* is limited to those antecedents that are topical or given. This limitation is apparent from its inability to mark conditional antecedents when they are focused. Consider the following contrast. In (24), the conditional describes a set of circumstances under which the event described in the consequent can be true, and that set of circumstances can be interpreted as discourse-old, backgrounded, given information, or using Haiman's terms, as "the framework which has been selected for the following discourse". In this context, the use of *–yoł̄i* is accepted. In (25) and in (26), the conditional antecedent is in focus, and the use of *–yoł̄i* is impossible (the required meaning can be expressed by a conditional converb; see CH. YY [Adverbial clauses]). Assuming that (non-contrastive) topic and (non-contrastive) focus are mutually exclusive,[4] the distribution shown in the examples below confirms the connection between the use of *–yoł̄i* as a conditional marker and the topic/background status of the respective conditional clauses.

(24)	[Meži	b-ik'i-no-si	(yoł)-yoł̄i]	[di-n	y-āk'i].
	2PL.ABS(.IPL)	IPL-go-PST-ATTR	be.PRS-COND	1SG.ABS(.II)-and	II-go.FUT
	'If y'all are going, I will go too.'				
(25)	*[Meži	b-ik'i-no-si	(yoł)-yoł̄i]	taraw [di	
	2PL.ABS(.IPL)	IPL-go-PST-ATTR	be.PRS-COND	except 1SG.ABS(.II)	
	y-āk'-inč'i].				

[4] See Bach (1972); Lambrecht (1994); for Tsez, see also Polinsky and Potsdam (2001).

II-go-FUT-NEG
('I will not go unless y'all go.')

(26) *[Meži b-ik'i-no-si (yoł)-yołi]-kin [di
2PL.ABS(.IPL) IPL-go-PST-ATTR be.prs-COND 1SG.ABS(.II)
y-āk'-inč'i].
II-go-FUT-NEG
('I will not go even if y'all go.')

Further still, material appearing on the right periphery of a clause, after the finite predicate, has a strong topic/discourse-old interpretation (see CH. YY [Word order] for a detailed discussion). Conditional antecedent clauses with *–yołi* most commonly precede their consequent clauses. However such an antecedent clause can also follow the consequent; in such a case, the information expressed in the antecedent clause must be interpreted as discourse-old, given. For example, in (27b), the information in the antecedent clause ("if I do the reading") has to be interpreted as something that has already been brought up in preceding discourse; if no such discussion has taken place, only (27a) is appropriate.

(27) a. [Di teter-xo-yołi] [mi kaɣat cax-a
1SG.ERG read-PRS-COND 2SG.ERG letter.ABS.II write-INF
y-āy].
II-must
b. [Mi kaɣat cax-a y-āy] [di teter-xo-yołi].
2SG.ERG letter.ABS.II write-INF II-must 1SG.ERG read-PRS-COND
'If I read, you have to write a/the letter.' (presupposes a prior discussion of who does the reading)

Turning now to the contrastive component of conditionals, many conditional structures imply the choice between two contrasting scenarios: *p* and ¬*p*. As Constant (2014:320-321) suggests, "with few exceptions, if you utter a conditional, I can reasonably respond with "And if not?" The contrastive function of *-yołi* is therefore warranted when it appears on a finite predicate of a clause that is interpreted as a conditional antecedent.

It is subject to a debate whether or not the contrastive topic marking on noun phrases is the same as the marker that appears on finite verbs to bring out the conditional interpretation; see Iatridou (2014) for a discussion of the Turkish *–sA* and some arguments against Haiman's proposal that one and the same suffix appears in two related functions. We do not take a stand on this issue; for the ease of exposition, we gloss *–yołi* uniformly as contrastive topic (CONTR.TOP) when it appears on constituents other than finite verbs and as conditional (COND) when it appears on finite verbs. Thus:

(28) If *–yołi* appears on a finite verb, the clause where this verb is predicate must have a conditional interpretation; in all other contexts, *–yołi* marks a contrastive topic.

We would like to emphasize that the enclitic *-yołi* is not a conjunction, nor does it form converbs. First, as we already noted, it appears on all kinds of constituents, both noun phrases and predicates. Second, clauses with *yołi*-marked predicates are clearly finite; the verb can

appear in any tense and the word order is typical of finite clauses and permits postverbal material—see examples (21) and (29**Error! Reference source not found.**). These facts indicate that *–yoɬi* is not a converbal suffix, unlike the suffixes of the conditional converbs discussed in CH. YY [Adverbial clauses].

Finite clauses with the predicate marked with *-yoɬi* do not always appear followed by an overt consequent. They can also occur as complete sentences on their own, with the material expressed in the consequent simply inferred. Compare the following example, where the implied contrast in (29) is between having and not having a wonderful leather bag; as in the examples above, without *–yoɬi* the sentence would have a simple possessive interpretation in the past ("I had such a leather bag to keep food."):

(29) Dey-n zow-s-yoɬi biš-ad-yo-qo-r hemediw
1SG.GEN1-and be.PST-PST.WIT-COND eat-ITER-OS-POSS-LAT such
eƛuk'.
leather.bag.ABS.IV
'If (only) I also had such a leather bag to keep food.' (Xanes užin kidno:25)

In the minimal pair below, (30a) is a genuine yes-no question with the presupposition that nobody has the right answer. The answer to that question could be 'yes' or 'no', depending on whether it is true that the right answer is amiss or not. Meanwhile, (30b) does not require a 'yes' or 'no' answer; instead, it asks a substantive question: what should be done if nobody has the right answer? In other words, the addition of *-yoɬi* turns a yes-no question into a fragment question,[5] with the conditional expressed and the consequent serving as the focus of the query (see Constant 2014: 350 for a similar contrast in Mandarin questions).

(30) a. Bit'araw žawab ła-r-kin b-iy-x-ān-ä?
correct answer.ABS.III someone-LAT-FOC III-know-PRS-NEG-INTERR
'Is it true that nobody knows the correct answer?'

b. Bit'araw žawab ła-r-kin
correct answer.ABS.III someone-LAT-FOC
b-iy-x-ān-ä-yoɬi?
III-know-PRS-NEG-INTERR-COND
'What if nobody knows the correct answer?'

A finite clause expressing the consequent of a conditional often includes the word *łemu(ri)*. Consider the example below, noting that we will delay categorizing this lexical item for now and represent it in the glosses simply as ŁEMU:

(31) [Neła ziy-s ħoši-s r-ˢeže-gon r-ˢeɣe-t'a
DEM.nI cow-GEN1 hide-GEN1 nIPL-big-CONTR nIPL-small-DISTR
t'it'ur-bi r-oy-s-yoɬi] [b-eže-gon b-aq'ˢu
piece-PL.ABS.nIPL nIPL-do-PST.WIT-CONTR.TOP III-big-CONTR III-many/much

[5] A fragment or truncated question is one where there is a necessarily presupposed component which is recoverable but not expressed (cf. Constant 2014: 327).

łemu dä-r micxir b-äqi].
ŁEMU 1PL-LAT money.ABS.III III-become.FUT
'If I had cut the cowhide into even smaller pieces, I would have made even more money.' (Q'orolas uži:62)

(32) [Mi sadaq zow-s-yołi] [q'ˁun-qo-n sadaq
2SG together be.PST-PST.WIT-CONTR.TOP two-POSS.ESS-TOP together
b-iq-as ža łemu].
III-be.gotten-FUT DEM.ABS(.III) ŁEMU
'If you had been with me, together the two of us could have captured it (the ram).' (Babiwn, užin, Okun:27)

Unlike *–yołi*, *łemu* seems to be a freestanding element, rather than an enclitic. Imnajšvili (1963:272) characterizes it as a particle occurring primarily with verbs. However, as the examples above attest, it has a broader distribution and a more defined meaning, and furthermore it does not lean on any other clausal constituent, the way enclitic particles in Tsez do (see CH.YY [Particles]). All of these facts qualify *łemu* as an adverb rather than a particle. Its placement in clauses also matches that of an adverb: it may occur at the left periphery of the clause, at the right periphery, or preverbally.

The main function of *łemu(ri)* is to indicate that a given state of affairs may hold if a given condition is met. In that general function, *łemu* is found not only in finite clauses joined with finite conditional clauses containing *–yołi,* but also in clauses joined with conditional converbal clauses with predicates in *–näy* and *–łi(ri),* and in concessive converbal clauses in *–łin* (see CH. YY [Adverbial clauses]). In all these uses, *łemu* seems to have the general function of indicating the hypothetical nature of the consequent, and we therefore propose to gloss it as 'hypothetical consequence' (HYP.CONS). In addition to this function, it conveys the desirability of the hypothetical event, which is why it is rejected in clauses expressing negative consequences such as (33):

(33) [Nagaħ mi ža teƛ-näy] [di
suddenly 2SG.ERG DEM.ABS give-COND.CVB 1SG.ABS(.I)
Ø-exu-xosi yoł (*łemu)].
I-die-PRS.PTCP be.PRS HYP.CONS
'If you sold it I would die.' (based on Babiwn, užin, Okun:47)

The following examples illustrate the use of *łemu* in the consequent of a concessive and conditional antecedent and in separate finite clauses; note that these later clauses could be interpreted as having an implicit conditional antecedent:[6]

(34) [*pro*$_i$ b-oč'č'iw b-oq-łin] [buq$_i$ łemu].
III-cold III-become-CONC.CVB sun.ABS.III HYP.CONS
'If only the sun were not so hot (lit: although cold…)' (Xalilov 1999:173)

(35) [Aždaħ b-ex-ur-näy] [kid-ba-bi xasar

[6] Imnajšvili (1963:272) characterizes the use of *łemu* in separate finite clauses as conjunction-like and translates it as 'but then; so then' (Russ. *a to*).

dragon.ABS.III III-die-CAUS-COND.CVB girl-PL.OS-PL.ABS.nIPL safe
r-äq łemu].
nIPL-become.FUT HYP.CONS
'If the dragon were killed (lit.: if someone killed the dragon) the girls would be saved.' (based on ʕAliqilič:97)

(36) łemu b-oƛƛik'u ric'q'i xan-q-āy b-äqi.
HYP.CONS III-half riches.ABS.III king-POSS-ABL III-be.gotten.FUT
'So then half of the king's riches could become yours.' (Q'ˁano halmaɣ:19)

(37) ɣˁay-n y-aq'ˁäł łemu.
milk.ABS.II-and II-increase.FUT HYP.CONS
'Then milk would also be more plentiful.' (Qˁay:38)

The appearance of *łemu* in a clause conjoined with another clause, where the predicate is marked with *–yoł*i, is therefore a particular subcase of the more general adverbial use of *łemu(ri)*.

4 Coreference across conjoined finite clauses

In CH. YY [Adverbial clauses], we examined coreference across converbal clause boundaries and showed that it is quite free. In particular, a converbal clause can include either a null pronominal or a demonstrative pronoun coreferential with a fully specified noun phrase in a finite clause; the opposite coreference pattern, whereby a noun phrase in a converbal clause is coreferential with a null pronominal or demonstrative in a finite clause, is equally possible.

Coreference across coordinated finite clauses is more restricted, and we will examine it in several stages: first, with respect to subject/highest argument antecedents, and then with respect to all other antecedents. For each of these subcases, we also need to distinguish between third person arguments and pronouns expressing speech act participants.

Third persons can be denoted by a demonstrative, a null pronominal, or a fully specified noun phrase. Coreference between a demonstrative or a null pronominal subject in the first finite clause and a fully specified noun phrase, regardless of its function, in the subsequent clause is impossible—compare the following example and its English counterpart, both of which are unacceptable when they exhibit coreference between the pronoun in the first clause and a noun phrase in the second:[7]

(38) [Ža/*pro*$_i$ y-ay-s], [Pat'i$_k$ ʕiyay-xosi yoł].
DEM.ABS(.II) II-come-PST.WIT Fatima.ABS.II cry-PRS.PTCP be.PRS
'She$_i$ came and Fatima$_k$ is crying.'
NOT: 'Fatima$_k$ came and she$_k$ is crying.'

[7] In the following examples, we hold gender constant across the arguments to avoid additional disambiguation cues.

The opposite pattern is fully acceptable (the disjoint reading is also possible in this case):[8]

(39) [Pat'i_k y-ay-s], [ža/*pro*$_i$ ʕiyay-xosi yoł].
Fatima.ABS.II II-come-PST.WIT DEM.ABS(.II) cry-PRS.PTCP be.PRS
'Fatima$_k$ came and she$_k$ is crying.'
'Fatima$_k$ came, and she$_i$ is crying.'

The disjoint reading can be enhanced by the use of the focus particle *–tow* on the demonstrative:[9]

(40) [Pat'i_k y-ay-s], [ža$_i$-tow ʕiyay-xosi yoł].
Fatima.ABS.II II-come-PST.WIT DEM.ABS(.II)-FOC cry-PRS.PTCP be.PRS
'Fatima$_k$ came and she$_i$ is crying.'

The pattern illustrated here stays the same even if the two clauses each have their highest argument expressed by a different case form. In the next sentence, the highest argument of the first finite clause is the external possessor (genitive) and the highest argument of the second clause is the absolutive subject:

(41) a. [Micxir ānu neł-qo$_i$] amma [Pat'i_k
money.ABS.III be.PRS.NEG DEM.nI-POSS.ESS but Fatima.ABS.II
y-ik'-a y-āy].
II-must II-go-INF
'She$_{i/*k}$ does not have money but Fatima$_k$ has to leave.'
b. [Micxir ānu Pat'i-q$_k$] amma [ža$_i$
money.ABS.III be.PRS.NEG Fatima-POSS.ESS but DEM.ABS(.II)
y-ik'-a y-āy].
II-must II-go-INF
'Fatima$_k$ does not have money but she$_{i/k}$ has to leave.'

Turning now to speech act participants, they can be expressed by either overt pronouns or by null pronominals. In several examples above, we have shown that overt pronouns are repeated in both finite clauses in a clausal coordinate structure—consider (5), (6), (7), (8), and (9). It is also possible for both pronouns to be omitted in the second clause, as in example (42) below, but it is generally unacceptable to omit the first pronoun and keep the one in the subsequent finite clause(s), as shown in (43).[10]

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[8] See also example (1), with the same coreference pattern; the antecedent, expressed by a noun phrase, appears in the first finite clause and is coindexed with a null pronominal in the second clause.

[9] See CH. YY[binding] and CH.YY[compl clauses] for similar use of the particle *–tow* in establishing coreference.

[10] Exceptions to this generalization have to do with what is known as "diary drop": the omission of subject pronouns or nouns in simple declarative sentences (Haegeman 1990, 1997). In (42) and (43), we find interrogatives that do not allow such diary drop.

(42) [Debe-r$_i$ di$_k$ y-eti-x-ä], [*pro$_i$* di/*pro$_k$*
2SG-LAT 1SG.ABS(.II) II-love-PRS-INTERR 2SG.ERG 1SG.ABS(.II)
y-ow-a yoł-ä]?
II-take-INF be.PRS-INTERR
'Do you love me, will you marry me?' (cf. (6))

(43) **pro*$_i$ *pro*$_k$ y-eti-x-ä, mi$_i$ di$_k$
2SG-LAT 1SG.ABS(.II) II-love-PRS-INTERR 2SG.ERG 1SG.ABS(.II)
y-ow-a yoł-ä?
II-take-INF be.PRS-INTERR
('Do you love me, will you marry me?')

If, however, the antecedent in the first finite clause is not the subject or the highest structural argument, it can be expressed by a demonstrative or even a null pronominal coreferential with a lexically expressed noun phrase in the next clause. For example:

(44) [Neła-r ža$_i$ Ø-ʕaq'ˤu Ø-eti-x zow-n],
DEM.nI-LAT DEM.ABS(.I) I-many/much I-love-IPFV.CVB be.PST-PST.nWIT
[hudun Musa$_i$ hiƛ'ar ānu-si Ø-ači-x
nevertheless Musa.ABS.I care.ABS.III be.PRS.NEG-ATTR I-stay-IPFV.CVB
zow-n].
AUX.PST-PST.nWIT
'She was madly in love with him$_i$; nevertheless Musa$_i$ did not pay attention to that.'
(Qacis gulu:7)

(45) [Ziru neł-ƛ'o-r$_i$ nex-xo-yoł̣i] [k'et'u$_i$
fox.ABS.III DEM.nI-POSS-LAT come-PRS-CONTR.TOP cat.ABS.III
ɣun-o-q-āy b-ok'-as].
tree-OS-POSS-ABL III-escape-FUT
'If a fox attacks it$_i$ (lit.: comes upon it), a cat$_i$ will escape from the tree.'

In summary, the rules of coreference across finite clauses are similar to those observed in more familiar languages such as English. However, since Tsez also uses null pronominals, there are more coreference options, as illustrated in the examples above.

Part 4: Clause level phenomena

Agreement
Reflexives and anaphora
Particles
Word order and information structure

Agreement and concord

1. General remarks

There are two domains of agreement in Tsez: the noun phrase and the clause. Within noun phrases, certain modifiers *agree* with the head noun in *gender and number*. Modifiers also show grammatical *concord* with the head noun in *case*. Within clausal syntax, the predicate and some adverbs *agree* with the absolutive noun phrase in *gender and number*. In a distinct case of long-distance agreement, such predicate agreement crosses the boundary of a tensed clause.

In what follows, we will discuss these instances of agreement in turn. Before we do so, we would like to remind our readers of the morphology of agreement and the composition of gender classes in Tsez. Agreement is marked by prefixes, which are given in Table 1. The prefixes that appear on verbs, adjectives, and adverbs are the same.

Table 1. Agreement prefixes

	Singular	Plural
Gender I	Ø-	b-
Gender II	y-	r-
Gender III	b-	
Gender IV	r-	

Not only do we find syncretism among the prefixes, but we also observe that only a subset of Tsez agreeing categories show agreement overtly (see CH. YY [Verb morphology]). If we assess the percentage of agreeing categories within their respective classes, agreeing verbs, adjectives, and adverbs make up only a small proportion of total verbs, adjectives, and adverbs in the dictionary (27% of verbs, 4% of adjectives).[1]

However, agreeing verbs and adjectives are highly frequent. In a corpus of child-directed speech, the majority of verb types and a minority of adjective types showed agreement (i.e., 60% of the different verbs that appeared in the corpus were agreeing verbs; 35% of the different adjectives were agreeing adjectives). Within tokens (the number of occurrences), however, the majority of both verbs and adjectives showed agreement—i.e., 84% of verbal tokens and 77% of adjectival tokens agreed with an associated noun phrase (Gagliardi and Lidz 2014: 68). In our own count of adverbial types and tokens within a set of over one hundred randomly selected adverbially modified clauses from Abdulaev and Abdulaev (2010), we observed only three types that took agreement (AGR-*ˢaƛo* ‘quickly’, AGR-*ig* ‘well’, and AGR-*aˢq’u* ‘many, much, very’), and a

[1] Estimating the percentage of adverbs is challenging because many adverbial phrases are expressed either by a noun in a spatial form or by a converbal clause.

token count of 24. These numbers indicate that Tsez makes up for the paucity of agreeing items in its lexicon by using those items quite extensively. As a result, agreement is very frequent in the language system and is highly visible to a child language learner (for the discussion of L1 agreement acquisition in Tsez, see Gagliardi and Lidz 2014).

2. Agreement and concord within a noun phrase

Adjectival modifiers that have an agreement prefix slot show obligatory agreement with the head noun in gender:

(1) a. Ø-exora žek'u
I-tall person.ABS.I
'a tall person/man'

b. y-exora ɣˀanabi
II-tall woman.ABS.II
'a tall woman'

c. b-exora got'i
III-tall haystack.ABS.III
'a high haystack'

d. r-exora ɣun
IV-tall tree.ABS.IV
'a tall tree'

e. b-exora uži-bi
IPL-tall boy-PL.ABS.IPL
'tall boys'

f. r-exora gulu-bi
nIPL-tall horse-PL.ABS.nIPL
'tall horses'

If two nouns of different genders are joined in a coordinate noun phrase, the gender agreement on their modifiers must be resolved. Resolved agreement defaults to the plural (this contrasts, however, with the more complex gender agreement found among coordinate noun phrases within clauses, which will be discussed in section 3.2 below). The rules are as follows:

(2) a. If at least one noun belongs to gender I, resolve gender agreement to I plural (IPL)

b. If all the nouns belong to other genders, resolve gender agreement to non-I plural (nIPL)

The order of nouns within the coordinate noun phrase does not matter. However, some examples below are ambiguous; ambiguity arises when the plural gender marker on the adjective is homophonous with the singular gender marker that matches the first of the coordinated nouns. For instance, *bexora žek'ubi* in (4b) can mean 'tall people' on its own:

(3) a. b-exora uži-n kid-no
IPL-tall boy.ABS.I-and girl.ABS.II-and
'tall [boy and girl]' /NOT 'a tall boy and a girl'

b. b-exora kid-no uži-n
IPL-tall girl.ABS.II-and boy.ABS.I-and
'tall [girl and boy]' /NOT: 'a tall girl and a boy'

(4) a. b-exora žek'u-bi-n ɣˤutku-n
IPL-tall person-ABS.IPL-and house.ABS.IV-and
'tall [people and house]' // 'tall people and a house'

b. b-exora ɣˤutku-n žek'u-bi-n
IPL-tall house.ABS.IV-and person-ABS.IPL-and
'tall [house and people]' /NOT: 'a tall house and people'

(5) a. r-igu t'ek-no kino-n
nIPL-good book.ABS.II-and movie.ABS.IV-and
'good [book and movie]' /NOT: 'a good book and a movie'

b. r-igu kino-n t'ek-no
nIPL-good movie.ABS.IV-and book.ABS.II-and
'good [movie and book]'/ 'a good movie and a book'

In section 3.2, we discuss resolved vs. closest conjunct agreement on verbs agreeing with coordinate phrases and show that closest conjunct agreement is widespread. Within nouns, the agreement on the adjective is typically resolved, but occasionally one finds instances of closest conjunct agreement as well, where the modifier agrees only with the adjacent conjunct. For example,(6) may be used in the meaning of (5a). Such examples are quite rare, however, and when elicited in isolation are judged awkward or inappropriate. This finding contrasts with the pervasive closest agreement in the verbal domain.

(6) y-edu t'ek-no kino-n
II-good book.ABS.II-and movie.ABS.IV-and
'good [book and movie]'

When two or more nouns are joined by *ya* 'or', we find a preference for repeating the adjective on each of the conjuncts, with the agreement determined only by each individual noun (7b,c); examples such as (7a) are considered awkward or confusing:

(7) a. #r-igu ya t'ek ya kino
nIPL-good or book.ABS.II or movie.ABS.IV
('good book or movie')

b. ya r-igu kino ya y-igu t'ek
or IV-good movie.ABS.IV or II-good book.ABS.II
'a good movie or a good book'

c. ya y-igu t'ek ya r-igu kino
or II-good book.ABS.II or IV-good movie.ABS.IV
'a good book or a good movie'

A special case of agreement is observed with two noun phrases combined paratactically in one compound noun, for example, *ħal-ruħ* 'might (lit.: health-strength)' or *ɣˤana-xediw* 'couple (lit.: woman-husband)', *eni-babiw* 'parents (lit.: mother-father)'. These compound nouns follow the agreement rules presented in (2). For example, both *ħal* and *ruħ* are gender III nouns but the compound *ħal-ruħ* is nIPL; conversely, the compounds *ɣˤana-xediw* and *eni-babiw* are gender IPL, following rule (2a). since even though the words for 'woman' and 'mother' belong to gender II, the words for husband and father belong to gender I and therefore determine agreement. It may be tempting to treat such compound nouns as separate lexical items, which is not improbable for such set phrases as *ɣˤana-xediw* 'couple' or *eni-babiw* 'parents'. However, compounding of this sort is extremely productive, and compounds, often involving reduplication, are created quite regularly, including ones with borrowed new words, as in (13) (where *pamidor* is a borrowing from Russian) and in (14).

(8) šeƛ'u=boƛ'u
[clothes.IV=clothes.IV].nIPL
'clothes'

(9) muži=q'ˤuri
[bed.III-bench.IV].nIPL
'bedding'

(10) meš(i)=kuro
[broom.IV-washtub.IV].nIPL
'house cleaning supplies'

(11) hawa=baq
[air.IV-sun.III].nIPL
'weather'

(12) hiƛ'i=baq'i
[care.III-life.III].nIPL
'greetings'

(13) pamidor-mumidor
[tomato.III-tomato.III].nIPL
'vegetables'

(14) ewro-dolar
[euro.II-dollar.II].nIPL
'hard currency'

Since speakers use this model very productively, it is unlikely that all such compound nouns can be listed in the lexicon. In light of the productivity of this pattern, it may make sense to treat at least the less common compounds as paratactic noun phrases, whose agreement is determined by the regular rules presented in (2) above. However, these compound nouns never trigger closest conjunct agreement with an adjective (as in (6) above) or with the verb (as will be discussed in section 3.2), and this sets them apart from regular coordinate noun phrases.

Concord within the noun phrase is based on the binary distinction between absolutive case and all other forms of the head noun. The following modifiers have direct and oblique forms: attributives in *–si*, some demonstratives (see CH. YY for details), numerals, and adnominal genitives. For attributives and adnominal genitives, the direct/oblique distinction is associated

with the markers *–s-* and *–z-* respectively (glossed as ATTR). In demonstratives and numerals, the marking of this distinction is more varied. Consider some examples below, and see also CH. YY [Noun phrase] for more examples and discussion.

(15) *concord in attributive adjectives*

a. huday-ƛ'-ay-si(-ni) mužmar
next-SUPER-ABL-ATTR-DEF Friday.prayer.ABS.III
'(the) next Friday prayer'

b. huday-ƛ'-ay-zo-ni mužmar-ƛ'o
next-SUPER-ABL-ATTR.OS-DEF Friday.prayer-SUPER.ESS
'at the next Friday prayer'

(16) *concord in adnominal genitives* (GEN1 vs. GEN2)

Gamuš-yo-z-ä aħozi-z oz-äy is-e-s
ox-OS-PL.OS-ERG shepherd-GEN2 eye-IN.ABL bull-OS-GEN1
c'iɣu y-oɣ-no.
shoulder.blade.ABS.II II-pull-PST.nWIT
'The oxen pulled the bull's shoulder-blade out of the shepherd's eye.'
(based on Yizałäy hič'č'a ixiw šebi yoł?:10)

(17) *concord in numerals*

a. oc'ino łˤono saʕat
ten three hour.ABS.III
'thirteen hours'

b. oc'ira łˤora saʕat-y-ä
ten.OS three.OS hour-OS-IN.ESS
'in thirteen hours'

(18) *concord in demonstratives*

a. yedu gulu
DEM horse.ABS.III
'this horse'

b. yiła gulu-ƛ'
DEM.OS horse-SUPER.ESS
'on this horse'

3. Agreement within the clause

3.1. Agreement is always with the absolutive

As mentioned above, verbs and agreeing predicative complements (and those adverbs that can show overt agreement) all agree with the absolutive argument—the sole argument of an intransitive verb and the object of a verb with two or more arguments. Any other agreement is

ungrammatical, as is the absence of agreement if an agreement slot is present.[2] Such agreement is therefore never optional. For example:

(19) *intransitive verb*
Isi *(y)-ay-s.
snow.ABS.II II-come-PST.WIT
'It snowed.'

(20) *transitive verb*
Uži-z-ä t'ek y-is-si/*b-is-si/*is-si.
boy-PL.OS-ERG book.ABS.II II-take-PST.WIT/*IPL-take-PST.WIT/take-PST.WIT
'The boys bought a book.'

Predicative adjectives agree with the absolutive argument as well; if the verb that the predicative adjective combines with also has an agreement slot, the verb shows agreement too.

(21) Yedu ħalt'i b-ˢeɣe ānu.
DEM.nI work.ABS.III III-small be.PRS.NEG
'This work is not light.'

If the predicative complement is expressed by a participle, that participle agrees with the absolutive it selects. Thus, an intransitive participle agrees with the absolutive subject of the clause it is derived from, and a transitive or ditransitive participle agrees with its verb's absolutive object (see CH. YY [Relative clauses] for details).

(22) a. Nesi-r šebin r-ig r-iy-x.
DEM.I-LAT thing.ABS.IV IV-well IV-know-PRS
'He is knowledgeable.' (lit.: knows things well)

b. [šebin r-ig r-iy-xosi] žek'u
thing.ABS.IV IV-well IV-know-PRS.PTCP person
'the person who is knowledgeable (knows things well)'

(23) a. K'et'-ä aw-bi r-iqir-si/riqir-xo.
cat-ERG mouse-PL.ABS.nIPL nIPL-catch-PST.WIT/nIPL-catch-PRS
'The cat caught/catches mice.'

b. [k'et'-ä r-iqä-ru/r-iqir-xosi] awbi
cat-ERG nIPL-catch-PST.PTCP/nIPL-catch-PRS.PTCP mice
'(the) mice that the cat caught/catches'

c. [aw-bi r-iqä-ru/r-iqir-xosi] k'et'u
mouse-PL.ABS.nIPL nIPL-catch-PST.PTCP/nIPL-catch-PRS.PTCP cat
'the cat that caught/catches mice'

If a participial clause, with or without its constituents, appears as a predicative complement, it retains the agreement marking of the corresponding finite verb. For example, in (24) the

[2] In the singular, the absence of agreement can be construed as marking gender I, whose agreement marker is null.

predicate is *riyxosi oqsi*. The corresponding verb AGR-*oq*- agrees with the absolutive subject 'this student' in gender I, but the participle maintains the agreement form determined by the corresponding finite clause in (22b):[3]

(24) Ža c'alduqan r-ig r-iy-xosi Ø-oq-si.
DEM student.ABS.(I) IV-well IV-know-PRS.PTCP I-become-PST.WIT
'This (male) student became very knowledgeable.'

Likewise, the following statement about a cat's hunting talents includes a participle that continues to agree with the absolutive denoting mice, even though this noun phrase is not actually present:

(25) Elu-s k'et'u r-iqir-xosi/b-iqir-xosi ānu.
1PL-GEN1 cat.ABS.III nIPL-catch-PRS.PTCP/III-catch-PRS.PTCP be.PRS.NEG
'Our cat does not catch mice.' (lit.: is not catching)

Verbs of motion often combine with converbs forming complex predicate structures; if all the constituents of such a complex verbal structures have an agreement slot, agreement appears multiple times. For example, in (26), we find two such complex verbal structures. The predicate of the embedded converbal clause *k'oλin* takes the agreeing converb *bet'un,* and the main predicate *boxis* (itself an agreeing one) combines with the agreeing manner converb *bizin*:

(26) Boc'i b-et'u-n k'oλi-n b-izi-n b-oxi-s
wolf.ABS.III III.jump-PFV.CVB run-PFV.CVB III-rise-PFV.CVB III-run-PST.WIT
el-äy.
there-ABL
'The wolf jumped quickly and ran away.' (lit.: having jumped running rising ran) (based on K'et'un zirun:28)

In complex verbs consisting of a noun and a light verb, the light verb always agrees with that noun. If the light verb is intransitive, the noun takes the position of the sole absolutive argument: consider *xot'o bič*- in (27), *ro'ku rik'*- in (28), or *roλ'i boq*- in (29):

(27) Dey q'ˢeca-ł xot'o b-iči-x.
1SG.GEN1 mud-CONT.ESS foot.ABS.III III-stay-PRS
'I stepped in the mud.' (lit.: my foot stays in dirt)

(28) Eniw-s rok'u q'idar r-ik'i-n.
mother-GEN1 heart.ABS.IV down IV-go-PST.nWIT
'Mother calmed down.' (lit.: Mother's heart went downward)

[3] The object of 'know' can appear in any gender, so the agreement on *–iyxosi* could vary. However, when 'know' is used generically as in (24), the presupposed object is taken to be gender IV, the gender of abstract nouns. In (25), the presupposed object can either be gender nIPL (any animals the cat could catch) or gender III (any singular animal the cat could catch).

(29) Babiw-s b-oq-ä… mesed-yo-z t'akan-yo-qo-r
father-GEN1 III-become-PST.WIT.INTERR gold-OS-GEN2 glass-OS-POSS-LAT
roƛ'i?
love.ABS.III
'Did the father fall in love with a glass filled with gold?' (Besurozaqu:66)
(lit.: did the father's love with a glass filled with gold happen?)

If the light verb is transitive, the noun takes the position of its absolutive object, as *ʕumru bod-* in (30), or *huni ric-* in (31). See CH. YY [Basic clause types] and CH. YY [verb derivation] for details.

(30) El-ä b-ig ʕumru b-oy-x.
1PL-ERG III-well life.ABS.III III-do-PRS
'We live well.' (lit.: we do life well)
(31) Žek'u-z žek'u-za-ł-or huni r-ic-o!
person-GEN2 person-PL.OS-CONT-LAT road.ABS.IV IV-tie-IMPER
'Watch after (the) strangers.' (lit.: tie the road…)

In the biabsolutive construction without the resultative participle, the converb always agrees with the patient absolutive:

(32) a. Kid ħak'o b-oy-x zow-s.
girl.ABS.II xinkal.ABS.III III-do-IPFV.CVB AUX.PST-PST.WIT
'The girl was making dumplings.'

In the biabsolutive construction with the resultative participle AGR-*ičäsi* (see CH. YY [Basic clause types]), that participle always agrees with the agent absolutive; the converb agrees with the patient absolutive. No other agreement options are available:

(33) a. Kid ħak'o b-oy-x y-ič-äsi yoł.
girl.ABS.II xinkal.ABS.III III-do-IPFV.CVB II-stay-RES.PTCP AUX.PRS
'The girl is busy making dumplings.'
b. *Kid ħak'o y-oy-x y-ič-äsi yoł.
girl.ABS.II xinkal.ABS.III II-do-IPFV.CVB II-stay-RES.PTCP AUX.PRS
c. *Kid ħak'o b-oy-x b-ič-äsi yoł.
girl.ABS.II xinkal.ABS.III III-do-IPFV.CVB III-stay-RES.PTCP AUX.PRS
d. *Kid ħak'o y-oy-x b-ič-äsi yoł.
girl.ABS.II xinkal.ABS.III II-do-IPFV.CVB III-stay-RES.PTCP AUX.PRS

3.2. Resolved vs. closest conjunct agreement

If a coordinate noun phrase appears in the absolutive position, there are two agreement options: resolved agreement (agreement with the entire noun phrase) or agreement with only one of the conjuncts (closest conjunct agreement). Resolved agreement is illustrated for English in the (a) examples below; closest conjunct agreement, where the verb agrees only with the conjunct that is next to it, is shown in the (b) examples.

(34) a. A Scotsman, an Englishman and an Irishman are sitting in a bar in New York…
b. A Scotsman, an Englishman and an Irishman is sitting in a bar in New York…
(35) a. There are a philosopher and a linguist in the room.
b. There is a philosopher and a linguist in the room.

Tsez has both patterns of agreement. When two or more nouns are joined within a coordinate noun phrase, resolved agreement follows the rules outlined for adjectival agreement with coordinated nouns in (2a, b): if at least one noun belongs to gender I, gender agreement is in IPL; otherwise, gender agreement is in nIPL.

The following examples illustrate these principles in verbal resolved agreement; they also show that the order of nouns inside the coordination, and the order of the agreeing element and the noun phrase, do not play a role in resolved agreement:

(36) a. Užin kid-no b-ik'i-s.
boy.ABS.I-and girl.ABS.II-and IPL-go-PST.WIT
'A boy and a girl left.'
b. B-ik'i-s k'et'u-n užin.
IPL-go-PST.WIT cat.ABS.III-and boy.ABS.I-and
'A cat and a boy left.'
(37) a. Kid-no aɣi-n roržizi r-oq-si.
girl.ABS.II-and bird.ABS.III-and flying nIPL-become-PST.WIT
'A girl and a bird flew.'
b. Q'edar r-ˢaƛ'i-s qˢabi-n saʕat-no.
downward nIPL-fall-PST.WIT tray.ABS.IV-and clock.abs.III-and
'A tray and a clock fell down.'

Nouns conjoined with 'or' can also determine plural agreement, as shown below. This contrasts with the facts on adjectival agreement with such nouns (see section 2 above).

(38) Ya q'ˢec ya isi r-oɣ-o.
or dirt.ABS.IV or snow.ABS.II nIPL-pull-IMPER
'Clean up either the dirt or the snow.'
(39) Ya gulu ya mašina r-eger-xo nes-ä.
or horse.ABS.III or car.ABS.III nIPL-send-PRS DEM.I-ERG
'He is sending either a horse or a car.'

Under closest conjunct agreement, the verb agrees with the coordinate noun phrase that is closest to it. Since an agreeing verb can either precede or follow the noun phrase it agrees with, the choice of closest conjunct is determined by the relative position of the verb and the noun phrase. Compare the following examples:

(40) a. Ya užin ya kid y-eger-xo nes-ä.
or boy.ABS.I or girl.ABS.II II-send-PRS DEM.I-ERG
b. Nes-ä Ø-eger-xo ya užin ya kid.
DEM.I-ERG I-send-PRS or boy.ABS.I or girl.ABS.II

'He is sending either a son or a daughter.'

(41) a. Baša-n k'icu-n y-oƛ-xo.
finger.ABS.III-and tooth.ABS.II-and II-hurt-PRS

b. B-oƛ-xo baša-n k'icu-n.
III-hurt-PRS finger.ABS.III-and tooth.ABS.II-and
'A finger and a tooth hurt.'

Closest conjunct agreement is quite frequent in texts and spontaneous speech. Consider some text examples:

(42) Xalq'i-n ʕaƛ-no b-ukay-nosi…[4]
people.ABS.III-and village.ABS.III-and III-see-ANT.CVB
'When they saw the people and the village…' (Č'ikayn, murin, hiƛun:29)

(43) Mesed-yo-s saħ-no t'as-no reƛ'iqoy-n
gold-OS-GEN1 measure.ABS.IV-and washbasin.ABS.III-and glove.ABS.IV-and
pandur-no b-oɣ-no xan-ez kid-be-q-äy.
lute.ABS.III-and III-pull-PST.nWIT king-GEN2 girl-OS-POSS-ABL
'He took away from the king's daughter, the measure of gold, the washbasin, the glove, and the lute.' (Xanes łʿono užin, sis kidno:97)

Closest conjunct agreement is possible only under adjacency; it becomes impossible if the agreeing constituent and the absolutive noun phrase are separated by intervening material (see also Benmamoun et al. 2009 for further discussion). Even compound verbs present an obstacle to closest conjunct agreement: compare (37a) above and its unacceptable counterpart below:

(44) *Kid-no aɣi-n roržizi b-oq-si.
girl.ABS.II-and bird.ABS.III-and flying III-become-PST.WIT
('A girl and a bird flew.')

When asked to adjudicate instances of closest conjunct agreement, speakers' judgments vary; sometimes the same example receives a positive and a negative assessment on different days. Even minor lexical changes in an example may sway judgments. Meanwhile, resolved agreement is always judged acceptable, although closest conjunct agreement is preferred over resolved agreement with disjunctive phrases such as (40). Overall, Tsez judgments on closest conjunct agreement are reminiscent of the judgments of English respondents queried by Green (1984) on sentences such as (34b) or (35b) above[5]—except that we did not have the luxury of consulting nineteen Tsez speakers.

[4] Although both nouns are gender III, the resolved agreement would have been nIPL.

[5] Green writes: "[N]o two of [19 consultants] accepted exactly the same set of sentences, … vacillating from moment to moment or day to day about whether certain examples were acceptable or not" (Green 1984: 29).

Finally, closest conjunct agreement is never observed with paratactically conjoined compound nouns such as those shown in examples (8) through (14) above. For instance, in the example below, the verb has to agree with the compound noun *ħal-ruħ* in gender nIPL. Only one pattern of agreement is possible despite the adjacency of the noun and the verb:

(45) Nesi-ł-er ħal-ruħ
DEM.I-CONT-LAT [health.ABS.III-strength.ABS.III].nIPL
r-ay-ä/*b-ay-ä?
nIPL-come-PST.INTERR/III-come-PST.INTERR
'Did his might come back to him?'

3.3. Concord in specificational copular clauses

The subject position of a specificational copular clause is filled by a headless relative,[6] and the predicate consists of the copula and its predicative complement, which can be expressed by a number of categories. If the predicative complement is a noun, it shows case concord with the presupposed head of the headless relative.

We will first illustrate this concord for a headless relative with an intransitive predicate. Consider the following baseline sentence:

(46) Debi uži žek'u-z žek'u-qo-r xabaryay-s.
2SG.GEN1 boy.ABS.I person-GEN2 person-POSS-LAT speak-PST.WIT
'Your son was talking to a stranger.' (lit.: to a person's person)

Two headless relatives can be formed from (46), one denoting the person doing the speaking (47a), and one denoting the person spoken to (47b). In both cases, the wh-word inside the headless relative clause, namely, the absolutive *šebi* or the poss-lative *łuqor*, can be omitted:

(47) a. (Šebi) žek'u-z žek'u-qo-r xabaryay-ä-si
who.ABS person-GEN2 person-POSS-LAT speak-PST.WIT.INTERR-ATTR
'(one) who was talking to a stranger'
b. (łu-qo-r) debi uži xabaryay-ä-si
who-POSS-LAT 2SG.GEN1 boy.ABS.I speak-PST.WIT.INTERR-ATTR
'(one) whom your son was talking to'

When such a headless relative clause appears as the subject of a specificational copular clause, the predicative complement must match the case of the gap/wh-word. In (48a), the gap corresponds to the absolutive noun phrase (the wh-word *šebi*), and the predicative nominal must be in the absolutive as well. In (48b), the wh-word is in the poss-lative (the gap corresponds to a poss-lative nominal), and the predicative nominal must appear in that form and no other:

[6] See CH. YY[RC] for more on headless relatives, and CH.YY [Binding] for connectivity effects in reflexives associated with headless relatives.

(48) a. [(Šebi) žek'u-z žek'u-qo-r xabaryay-ä-si]
who.ABS person-GEN2 person-POSS-LAT speak-PST.WIT.INTERR-ATTR
debi užі/ *debe-z už-ä/*debe-z užі-qo-r (yoł).
2SG.GEN1 boy.ABS/2SG.GEN2 boy-ERG/2SG.GEN2 boy-POSS-LAT be.PRS
'It was your son who was talking to a stranger.'

b. [(łu-qo-r) debi užі xabary-ä-si]
who-POSS-LAT 2SG.GEN1 boy.ABS speak-PST.WIT.INTERR-ATTR
žek'u-z žek'u-qo-r/*žek'u-s žek'u zow-s.
person-GEN2 person-POSS-LAT/person-GEN1 person.ABS.I be.PST-PST.WIT
'It was a stranger that your son was talking to.' (lit.: to the one whom your son was talking to was to a stranger)

The same case matching holds regardless of the transitivity of the headless relative clause; compare the following examples, where (49) is the baseline sentence:

(49) Eni-y-ä bazar-y-äy kunta b-is-si.
mother-OS-ERG market-OS-IN.ABL dress.ABS.III III-take-PST.WIT
'Mother bought a dress at the market (lit.: from the market).'

In the copular clauses below, the predicative complement again matches the case of the wh-word/gap in the headless relative:

(50) a. [(łu) bazar-y-āy kunta b-is-ä-si]
who-ERG market-OS-IN.ABL dress.ABS.III III-take-PST.WIT.INTERR-ATTR
dä-z eni-y-ä /*eniw (yoł).
1SG-GEN2 mother-OS-ERG/mother.ABS be.PRS
'It is my mother who bought a dress at the market.'

b. [(Šebi) eni-y-ä bazar-y-āy b-is-ä-si]
what.ABS.(III) mother-OS-ERG market-OS-IN.ABL III-take-PST.WIT.INTERR-ATTR
bercinaw kunta (yoł).
beautiful dress.ABS.III be.PRS
'It is a beautiful dress that mother bought at the market.'

The examples in (50) point to another property of agreement in copular clauses: if the referent of the absolutive is known or presupposed, the verb in the headless relative agrees with the corresponding noun phrase in gender. The wh-word *šebi* does not have a fixed gender; its gender is assigned based on the context or the lexical properties of the verb it pairs with. For example, when *šebi* occurs with the verbs of motion AGR-*ay* or AGR-*ik'*-, it is assumed to reflect an animate noun; in this case, it can occur in gender I, II, or III, but not IV, in the singular. When its verbal context suggests that *šebi* is reflecting an inanimate noun with unspecified gender, *šebi* appears in gender IV. However, in (50b), the verbal form *b-isäsi* shows agreement in gender III, matching the gender of the word 'dress'. Similarly, in the following example, the predicative nominal has to be in gender II because the predicate of the headless relative, the participle *y-ičixosi*, agrees with a gender II noun:

(51) [Šebi) q'ˤir-yo-ƛ' y-iči-xo-si] madina/*ramazan.
who.ABS.(II) floor-OS-SUPER.ESS II-sit-PRS-ATTR Madina.ABS.II/Ramazan.ABS.I
'It is Madina who likes to sit on the floor.'

Accordingly, in (52), the presupposed predicative nominal is either gender I plural or gender III singular:

(52) a. [(Šebi) zarema-r b-et-ä-si]
whoABS.(IPL) Zarema-LAT IPL-like-PST.WIT.INTERR-ATTR
ʕali-n pat'i-n yoł.
Ali.ABS.I-and Fatima.ABS.II-and be.PRS
'It was Ali and Fatima who/that Zarema liked.'
b. [(Šebi) zarema-r b-et-ä-si]
what.ABS.(III) Zarema-LAT III-like-PST.WIT.INTERR-ATTR
elu-s sayɣat yoł.
1PL-GEN1 gift.ABS.III be.PRS
'It was our gift that Zarema liked.'

4. Agreement under restructuring

The agreeing restructuring verbs are: the modal AGR-*ay*- 'must'; the modal AGR-*äsu*- 'may'; the verb AGR-*oq*- in the modal meaning 'can, be able to' (co-occurring with a converb), and complex modals formed with this verb; the verb AGR-*ič*- in the meaning 'continue'; the verb AGR-*et*- in the meaning 'want'; and the specialized use of the verb AGR-*esu*- 'appear' in conditionals. For details on the use of restructuring verbs, see CH. YY [Complement clauses]. These verbs obligatorily agree with the absolutive argument they share with the lower verb in the complex predicate structure.[7] No other agreement is possible.

Consider the examples below. In (53), the modal AGR-*āy* is part of the complex predicate with a transitive infinitive, and in (54), the same modal forms a complex predicate with an intransitive verb. In both examples, the agreement is uniformly with the absolutive.

(53) Xalq-em-ä žuka šebin eƛ-a r-āy-inč'i.
people-OS-ERG bad thing.ABS.IV say-INF IV-must-NEG
'People should not (lit.: must not) say bad things.'
(54) Ža debi reƛ'iqoy bat'iyaw-tow-ä r-ič-a r-ay-x?
DEM 2SG.GEN1 glove.ABS.IV different-FOC-INTERR IV-stay-INF IV-must-PRS
'That glove of yours must be really special, mustn't it?' (Xanes łˤono užin, sis kidno:30)

In (55), the verb AGR-*oq*- as 'can' also forms a complex predicate with a transitive verb, showing appropriate agreement, with the absolutive.

[7] It does not matter whether or not the lower verb itself shows agreement.

(55) Neła k'et'-ā aw b-iqir-xo b-oq-n-ānu.
DEM.nI.OBL cat-ERG mouse.ABS.III III-get-IPFV.CVB III-can-PST.nWIT-NEG
'That cat could not catch a mouse.'

In the following examples, the modal 'may' forms complex predicates with different types of verbs but the agreement is invariably with the absolutive argument:

(56) Irbahine-e-r yedu ħalt'i b-et-a b-äsu.
Ibrahim-OS-LAT DEM work.ABS.III III-like-INF III-may
'Ibrahim may like this work.'

(57) Nesa c'alduqan-qo tetrad
DEM.I.OBL student-POSS.ESS notebook.ABS.II
gug-a/gugi-n y-äsu-nč'i.
disappear-INF/disappear-PFV.CVB II-may-NEG
'This student may not lose a notebook.' (lit. It may not be that a notebook disappears on this student)

Several of these restructuring verbs can also function as verbs that take a genuine clausal complement, forming a biclausal construction, and since the meaning differences between these constructions may be very subtle, agreement becomes one of crucial diagnostics for differentiating between a biclausal structure and a restructuring clause. The details of biclausal structures are presented in CH. YY [Complement clauses].

5. Long-distance agreement

5.1. The phenomenon

Long-distance agreement (often appearing under the abbreviation LDA in the literature) arises when the absolutive argument in an embedded clause, which is itself in the absolutive argument position, determines agreement on the predicate of the clause immediately above it.[8] For example, in (58), the matrix verb AGR-*ukad*- 'see' agrees with the absolutive noun phrase *elus ɣ^{w}ˁay* 'our dog' contained in the embedded nominalized clause (that clause is shown in brackets):

(58)) Dä-r [elu-s ɣ^{w}ˁay k'et'u-za-ł xizay k'āłi-ru-łi]
1SG-LAT 1PL-GEN1 dog-ABS.III cat-PL.OS-CONT.ESS behind run-PST.PTCP-NMLZ
b-ukay-s.
III-see-PST.WIT
'I saw how our dog was chasing cats.' (lit.: ran behind cats)

In (59), the verbal part of the compound verb 'remember' (lit. 'come upon heart') agrees with the absolutive of the embedded clause, *pat'i*, in gender II:

(59) Nesi-r rok'-ƛ'o-r y-ay-n [nāzon

[8] This phenomenon is sometimes referred to as "transparent agreement" (see Corbett 2006:65).

DEM.I-LAT heart-SUPER-LAT II-come-PST.nWIT all.OS
c'aldoqan-za-ƛ'āy pat'i hič'č'a ˁaq'luyaw
student-PL.OS-SUPER-ABL Fatima.ABS.II most clever
yäł-ru-łi].
be.PRS-PST.PTCP-NMLZ
'He remembered that Fatima was the smartest among the students.'

As these preliminary examples show, long-distance agreement is possible regardless of the position of the complement clause in relation to the agreeing verb; in (58) the verb follows the clausal complement, and in (59), it precedes it.

Long-distance agreement alternates with a pattern where the verb agrees with the entire complement clause in gender IV (clauses, as derived abstract nouns, are always gender IV); compare the agreement pattern in (58) with the one in (60), and the pattern in (59) with the one in (61). Below, we will be referring to the latter pattern as "properly local agreement".

(60) Dä-r [elu-s ɣ^{w}ˁay k'et'u-za-ł xizay
1SG-LAT [1PL-GEN1 dog-ABS.III cat-PL.OS-CONT.ESS behind
k'äłi-ru-łi] r-ukay-s.
run-PST.PTCP-NMLZ].ABS.IV IV-see-PST.WIT
'I saw that our dog was chasing cats.'/ 'I saw our dog chase/chasing cats.'

(61) Nesi-r rok'-ƛ'o-r r-ay-n [nāzon
DEM.I-LAT heart-SUPER-LAT IV-come-PST.nWIT [all.OS
c'alduqan-za-ƛ'āy pat'i hič'č'a ˁaq'luyaw
student-PL.OS-SUPER-ABL Fatima.ABS.II most clever
yäł-ru-łi]
be.PRS-PST.PTCP-NMLZ].ABS.IV
'He remembered that Fatima was the smartest among the students.'

The choice between the two agreement patterns is determined by information-structural considerations, which we discuss in section 5.3 below.

Generally, long-distance agreement takes some effort to spot because several conspiring factors may obscure it. First, only some Tsez verbs show agreement overtly anyway. Next, since long-distance agreement alternates with properly local agreement (as shown in (60) and (61)) the difference between the two cannot be observed if the embedded absolutive is also gender IV or nIPL. Finally, long-distance agreement is only possible if the clausal complement is a nominalization in *–łi*; as we show in (66), verbs that take complements with quotative *-ƛin* never show long-distance agreement (and verbs that take infinitival complements show agreement under restructuring, as discussed in section 4). Taking all these restrictions into consideration, we find that the following predicates can participate in long-distance agreement when they take a nominalized clausal complement:

(62) a. AGR-iy-
'know'
b. AGR-ukad-

'see'

c. AGR-ac-
'dislike, disprefer'

d. bičzi AGR-oq-
'be clear'

e. rok'-ƛo-r AGR-ay-
heart-SUPER-LAT come
'remember, memorize'

f. rok'-e-r AGR-it-
heart-OS-LAT touch
'learn, internalize'

g. č'alʕizi AGR-oq-
enough become
'bother, irk'

The number of long-distance-agreeing predicates can be increased by adding their causative counterparts: AGR-*iyr*- 'let s.o. know, make known' (causative of (62a)), AGR-*ukar*- 'show' (causative of (62b)), *bičzi* AGR-*od*- 'make clear; explain' (causative of (62d)), and so on.

5.2. Structural conditions on long-distance agreement

Long-distance agreement is only possible if the clausal complement is itself in the absolutive argument position. For example, in (63), the clausal complement appears in an oblique form and long-distance agreement is impossible:[9]

(63) Nesi-r [yedu t'ek t'et'ä-ru-[łi-]r
DEM.I-LAT DEM book.ABS.II read.PRS-PST.PTCP-[NMLZ-]LAT
kumak b-od-o/*y-od-o.
help.ABS.III III-do-IMPER/II-do-IMPER
'Help him with the reading of this book.'

In (64), the absolutive noun phrase *eli* also appears in an adjunct clause and the main clause already has an absolutive subject *eniw.* The lower absolutive cannot compete because it is inside the clause, which is not in the absolutive position:

(64) Eniw [mi eli b-aƛ'ä-ru-[łi-]ƛ]
mother.ABS.II 2SG.ERG 1PL.ABS.IPL IPL-deceive-PST.PTCP-[NMLZ-]SUPER.ESS
ħayran y-oq-si/*b-oq-si.
surprised II-become-PST.WIT/IPL-become-PST.WIT
'Mother was surprised that you deceived us.' (lit.: at your deceiving us)

[9] When clausal nominalizations appear in cases other than the absolutive, the nominalizer *–łi* is not present. The verb stays in the perfective participle form, indicating nominalization. For such instances, we show the morpheme *–łi* and the corresponding gloss NMLZ in brackets.

In the next example, the candidate absolutive noun phrase *ƛirba* appears in an adjunct clause and long-distance agreement is again impossible. (Note that, crucially, *šida* 'why' is the matrix question-word, and not part of the periphery of the embedded clause.)

(65) [ƛirba debe-r Ø-esu-näy] šida mi
guest.ABS.I 2SG-LAT I-find-COND why 2SG.ERG
r-iy-r-inč'u/*Ø-iy-r-inč'u?
IV-know-CAUS-PST.WIT.NEG/I-know-CAUS-PST.WIT.NEG
'If you noticed the guest why did you not make that known?'

Long-distance agreement is only possible if the clausal complement is a nominalization in *–łi*. Verbs that take infinitival complements show agreement under restructuring (see CH.clausal compl), and verbs that take complements with the quotative *-ƛin* never show long-distance agreement. Compare (59), and (66):

(66) Nesi-r rok'-ƛ'o-r r-ay-n/*y-ay-n
DEM.I-LAT heart-SUPER-LAT IV-come-PST.nWIT/II-come-PST.nWIT
[nāzon c'aldoqan-za-ƛ'āy pat'i hič'č'a ˁaq'luyaw
[all.OS student-PL.OS-SUPER-ABL Fatima.ABS.II most clever
yoł]-ƛin.
be.PRS-QUOT].ABS.IV
'He remembered that Fatima was the smartest among the students.'

If several clauses are embedded one under another, long-distance agreement cannot take place through more than one clause; in other words, long-distance agreement is clause-bounded. This is not the only instance where Tsez syntax shows a strong insistence on clause-boundedness; wh-movement is also clause-bounded, as shown by the data from embedded interrogatives (see Ch. YY "Interrogatives" and see also Polinsky and Potsdam 2001:599-600, for a discussion).

(67) *[[Elu-s ɣ^{w}ˁay k'et'u-za-ł xizay
[1PL-GEN1 dog-ABS.III cat-PL.OS-CONT.ESS behind
k'ałi-ru-łi] dä-r b-äci-ru-łi] debe-r b-iy-x.
run-PST.PTCP-NMLZ].ABS.IV 1SG-LAT III-dislike-PST.PTCP-NMLZ 2SG-LAT III-know-PRS
'You know that I can't stand that our dog chases cats.'

Next, if several clauses are embedded one under another long-distance agreement cannot skip an intervening clause and be registered only on a higher verb:[10]

(68) *[[Elu-s ɣ^{w}ˁay k'et'u-za-ł xizay
[1PL-GEN1 dog-ABS.III cat-PL.OS-CONT.ESS behind
k'ałi-ru-łi] dä-r r-äci-ru-łi] debe-r b-iy-x.
run-PST.PTCP-NMLZ].ABS.IV 1SG-LAT IV-dislike-PST.PTCP-NMLZ 2SG-LAT III-know-PRS

[10] Of course, properly local agreement on both embedding verbs, AGR-*ac*- and AGR-*iy-,* is fully acceptable.

('You know that I can't stand that our dog chases cats.')

This unusual pattern of agreement raises the question of whether the agreed-with noun phrase is actually present in the same clause as the agreeing verb. To represent this schematically, one could imagine that the actual absolutive noun phrase was in the clause above the clausal complement, not inside the clausal complement. This structure is shown in (69), with the English translation illustrating a similar type of construction (where *our dog* is a complement of *see*):

(69) Dä-r elu-s ɣ^{wc}ay [k'et'u-za-ł xizay
1SG-LAT 1PL-GEN1 dog-ABS.III [cat-PL.OS-CONT.ESS behind
k'ałi-ru-łi] b-ukay-s.
run-PST.PTCP-NMLZ].ABS.IV III-see-PST.WIT
'I saw our dog [chasing cats].'

One of the considerations against (69) has to do with the numerous instances in which the absolutive noun phrase is separated from the agreeing higher verb and found in the middle of the embedded clause, as for example in (61). In no other instances are Tsez clausal complements discontinuous, so proposing a discontinuity under long-distance agreement is unmotivated.

Another analytical possibility is *prolepsis*: the appearance of a proleptic or "prothetic" pronoun, which anticipates the actual DP that the verb seems to agree with; in such a structure, the agreement is actually with the proleptic pronoun. On one implementation of this proposal, the silent anticipatory pronoun occurs in the matrix (higher) clause and is simply coreferential with the absolutive noun phrase in the lower clause, as shown in the following representation:

(70) Dä-r *pro*$_i$/*ža [elu-s ɣ^{wc}ay$_i$ k'et'u-za-ł xizay
1SG-LAT DEM.ABS [1PL-GEN1 dog-ABS.III cat-PL.OS-CONT.ESS behind
k'ałi-ru-łi] b-ukay-s.
run-PST.PTCP-NMLZ].ABS.IV III-see-PST.WIT
'I saw our dog chasing/chase cats." (lit.: "I saw of it$_i$ that our dog$_i$ was chasing cats."

Prolepsis is attested across a number of languages, see Frantz (1978; 1980) for proleptic agreement in Blackfoot (Algonquian), and see Branigan and MacKenzie (2002) for arguments against prolepsis in another Algonquian language, Innu-aimûn. See also Polinsky (2003) and Davies (2005) for a more general discussion of prolepsis and further references.

A consideration against prolepsis is the fact that the hypothetical null pronoun or demonstrative in the higher clause can never be overt, as we show in (70). Noun phrase omission is very common in Tsez, but in all other cases, the missing constituent can be overtly represented, so the absence of an overt form in (70) would be mysterious on a prolepsis analysis.

An additional consideration against both (69) and (70) comes from observations of quantifier scope and scope of numerical phrases. If the agreed-with absolutive noun phrase were indeed in the same clause as the higher agreeing verb, then we would expect that the agreed-with absolutive noun phrase could interact with other constituents in that clause; in particular, it should be able to take scope over these constituents, leading to ambiguities in meaning.

Independent evidence shows that Tsez has both surface and inverse quantifier scope. Consider the ambiguity in (71), which permits two interpretations: a single girl was carrying all the balloons (a/one > every), or for each balloon, there was a girl carrying it (every > a/one). Such scopal ambiguity is very similar to what is observed in the English equivalent of (71).

(71)	Sida	kid-b-ä	šibaw	šar	b-ow-xo	zow-s.
	one.OS	girl-OS-ERG	every	balloon.ABS.III	III-carry-IPFV.CVB	AUX-PST.WIT

'One/A girl was carrying every balloon.' (a/one > every; every > a/one)

However, the absolutive noun phrase that induces long-distance agreement does not interact scopally with constituents of the higher clause. If that absolutive noun phrase were present in the higher clause we would expect the same ambiguity we see in (71). But the example in (72) is unambiguous; it can only be interpreted to mean that a single person saw the demise of ten balloons. This is unexpected if the noun phrase *oc'ino šar* is in the same clause as *sida žek'ur,* but is consistent with the conception that these two noun phrases are in different clauses. We conclude that long-distance agreement occurs across a clausal boundary.

(72)	Sida	žek'u-r	[oc'ino	šar	pˀäƛi-ru-łi]
	one.OS	person-LAT	ten	balloon.ABS.III	burst-PST.PTCP-NMLZ
	b-ukay-s.				
	III-see-PST.WIT				

'Someone saw how ten ballons burst.' (someone > ten; *ten > someone)

The final structural condition on long-distance agreement has to do with locality. Although the agreed-with absolutive noun phrase and the agreeing verb are in different clauses, they have to be structurally close to each other, and cannot be separated by intervening material that blocks long-distance agreement. Such intervening material includes complementizers like *-ƛin* (recall example (66) above, which showed that long-distance agreement is impossible across *–ƛin*) or wh-words, which are structurally higher than topics (see Polinsky and Potsdam 2001 for a detailed structural analysis). For example, only properly local agreement is possible in (73) and (74), where the wh-words 'who' and 'where' intervene to block the agreement between the embedded absolutive and the higher verb.

(73)	Eniw-r	[łu	sult'an	gäƛ'-ru-łi]
	mother-LAT	who.ERG	Sultan.ABS.I	call-PST.PTCP-NMLZ
	r-iy-s/*Ø-iy-s			
	IV-know-PST.WIT/I-know-PST.WIT			

'Mother knew who had called Sultan.'

(74)	Dä-r	r-iy-x-ānu/*y-iy-x-ānu		[na-z-āy
	1SG-LAT	IV-know-PRS-NEG/II-know-PRS-NEG		where-OS-IN.ABL
	yedu	kid	y-äy-ru-łi].	
	DEM.nI	girl.ABS.II	II-come-PST.PTCP-NMLZ	

'I don't know where this girl comes from.'

Long-distance agreement as a syntactic phenomenon has generated quite a bit of interest in the literature; for various syntactic analyses, see Polinsky (2000), Polinsky and Potsdam (2001).

Genuine cross-clausal long-distance agreement has been observed in Algonquian languages (see Bruening 2001 for Passamaquoddy; Branigan and MacKenzie 2002 for Innu-aimûn; Lochbiler 2012 for Ojibwe), possibly in Greek and Romanian (Alexiadou et al. 2012), and in at least some other Nakh-Dagestanian languages (see Forker 2013: 628-638 for long-distance agreement in Hinuq; Khalilova 2009: 383-390 for long-distance agreement in Khwarshi, and van den Berg 1995: 190, 211, 240 for Hunzib examples). In these languages, the agreed-with embedded argument is interpreted as a discourse topic, as a contrastive constituent, or both. Care should be taken, however, to distinguish between long-distance agreement that takes place across a clause boundary, as in Tsez, and agreement that operates over several verbal constituents which form a complex verb phrase (as under restructuring, which was discussed in section 4 above); see Polinsky (2003) for further discussion.

5.3. The choice between two agreement patterns

The choice between long-distance agreement and properly local agreement is determined by the information-structural status of the absolutive noun phrase that triggers agreement. In Tsez, long-distance agreement occurs when the absolutive noun phrase is identified as having topic properties. A referent is interpreted as the topic of a proposition "if in a given situation the proposition is construed as being about this referent; ... a constituent is a topic expression if the proposition expressed by the clause with which it is associated is pragmatically construed as being about the referent of this constituent" (Lambrecht 1994: 131). Establishing topic and focus interpretations requires relying on the context in which an utterance is used, which is why some examples with and without long-distance agreement may seem unclear out of context. Particularly telling with respect to Tsez long-distance agreement are those expressions that *cannot* induce such agreement. They fall consistently into the class of phrases that cannot be interpreted as topics.

In particular, noun phrases denoting non-specific referents cannot be topics. Dedicated non-topics include quantified expressions, expressions in the form 'such a …', and noun phrases whose reference depends on an antecedent (reflexives). Noun phrases from these categories can never determine long-distance agreement in Tsez. In (75), the embedded absolutive is the understood negative polarity item; in (76), it is the weakly quantified expression 'many people', which can be interpreted as an existential phrase; in (77), it is the noun phrase 'such a dress'; and in (78), it is a compound reflexive.

(75) Dä-r r-iy-x/*Ø-iy-x [mi taraw teł-xor *pro*
1SG.DAT IV-know-PRS/I-know-PRS 2SG.ABS except inside-VERS ABS.I
Ø-āq-inč'i-ru-łi].
I-become-NEG-PST.PTCP-NMLZ
'I know that nobody except you came in.'

(76) Dä-r r-iy-x/*b-iy-x [b-ˢaq'u-si xalq'i
1SG.DAT IV-know-PRS/IPL-know-PRS IPL-many-ATTR people.ABS.IPL
samolyot-λo zow-ani-q b-ˢäλ-ru-łi.
plane-SUPER.ESS climb-MSD-POSS.ESS IPL-fear-PST.PTCP-NMLZ
'I know that many people are afraid to fly.'

(77) Dä-r [neł-ä nesiw kunta y-is-a y-äy-ru-łi]
1SG-LAT DEM.nI-ERG such dress.ABS.II II-take-INF II-must-PST.PTCP-NMLZ

r-iy-x/*y-iy-x.
IV-know-PRS/II-know-PRS
'I know that she must buy such a dress.'

(78) Dä-r [neł-ä nełä ža y-ägi-ru-łi] r-iy-x/
1SG-LAT DEM.nI-ERG REFL.nI.ABS II-send-PST.PTCP-NMLZ IV-know-PRS
*y-iy-x.
II-know-PRS
'I know that she sent herself.'

Existential pivots likewise fail to induce long-distance agreement:

(79) Dä-r [eniw-q micxir yäł-ru-łi] r-iy-x/
1SG-LAT mother-POSS.ESS money.ABS.III be-PST/PTCP-NMLZ IV-know-PRS
*b-iy-x.
III-know-PRS
'I know that Mother has money.' (lit.: I know that tjere is money on Mother)

Topic and focus are normally mutually exclusive (although see some additional considerations below), and absolutive noun phrases explicitly marked for focus (with the focus particles *–kin* or *–tow*)[11] cannot induce long-distance agreement. Compare example (58) above and the following sentence where 'dog' is in focus:

(80) Dä-r [elu-s ɣ$^{w\varsigma}$ay-kin/ɣ$^{w\varsigma}$ay-tow k'et'u-za-ł xizay
1SG-LAT 1PL-GEN1 dog-ABS.III-FOC/dog-ABS.III-FOC cat-PL.OS-CONT.ESS behind
k'äłi-ru-łi] r-ukay-s/*b-ukay-s.
run-PST.PTCP-NMLZ IV-see-PST.WIT/III-see-PST.WIT
'I saw that it was our dog that was chasing cats.'

Generic sentences are often characterized as lacking a topic, and indeed, if a genuine generic clause is embedded under one of the long-distance-agreement-taking verbs, only local agreement is possible. For example, in (81a) we find an embedded generic statement, whereas (81b) is interpreted as a comment on certain properties of the earth, and is judged odd:

(81) a. Nāzon r-iy-x [dunyal buq-qo šet'u
all.OS IV-know-PRS earth.ABS.III sun-POSS.ESS around
b-äti-ru-łi].
III-turn-PST.PTCP-NMLZ
'Everybody knows that the earth rotates around the sun.'

b. #Nāzon b-iy-x [dunyal buq-qo šet'u
all.OS III-know-PRS earth.ABS.III sun-POSS.ESS around
b-äti-ru-łi].
III-turn-PST.PTCP-NMLZ
'As for the earth, everybody knows that it rotates around the sun.'

[11] For details on the use of these particles, see Ch. YY[PARTicles].

Now that we have identified the expressions that are unable to determine long-distance agreement, let us consider the eligible absolutives. Three groups of expressions are permitted under long-distance agreement: topics proper, contrastive topics, and discourse-linked wh-words. In the following excerpt, the camel is an established topic and the matrix clause shows long-distance agreement with the inferential topic ("its right leg"), represented by the absolutive argument *nełas kut'yos k'onč'u;* this constituent is the main topic in its clause ("its right leg is limping"), embedded under AGR-*iy*- 'know':

(82) Debe-r ža ħumukuli b-ukay-n b-esu-nč'i-näy
2SG-LAT DEM camel.ABS.III III-see-PFV.CVB III-appear-NEG-COND.CVB
na-z-āy debe-r neła-s kut'yos k'onč'u
where-OS-IN.ABL 2SG-LAT DEM.nI-GEN1 right leg.ABS.II
šiqʿono yäł-ru-łi y-iy-x?
limping be.PRS-PST.PTCP-NMLZ II-know-PRS
'Assuming you have not seen that camel, how (lit.: from where) do you know that its right leg is limping?' (Xanno, nesisgon łʿono užin:88)

In the same text, as the protagonists are discussing the aforementioned camel (which they have not seen but can describe based on the traces the camel left), that camel is clearly a topic, and the demonstrative *ža* associated with it in the example below determines long-distance agreement on the converb:

(83) [Ža nediw yäł-ru] mi b-iy-r-zaƛ'…
DEM.ABS(.III) such be.PRS-PST.PTCP 2SG.ERG III-know-CAUS-because
'Since you learned what it [the camel] is …' (Xanno, nesisgon łʿono užin:19)

While main clause topics are normally marked with the enclitic *–n(o)*, the presence of that enclitic on the embedded absolutive noun phrase under long-distance agreement is judged redundant. This suggests that *–n(o)* and long-distance agreement serve the same function. Compare the root clause with a *no*-marked topic in (84a) and the same clause under embedding in (84b):

(84) a. Nes-ä eniw-n goƛ'i-s.
DEM.I-ERG mother.ABS.II-TOP call-PST.WIT
'Mother, he called.'

b. Debe-r [nes-ä eniw(-n) gäƛ'i-ru-łi]
2SG-LAT DEM.I-ERG mother.ABS.II-TOP call-PST.PTCP-NMLZ
y-iy-ä?
II-know-PST.WIT.INTERR
'Speaking of Mother, did you know that he called her?'

A contrastive topic is a special subtype of topic, which not only identifies the referent that the sentence is "about", but also instructs the listener to construct a contrast set and then select an item out of that set (see further discussion in CH. YY [Particles]). Such topics, often explicitly compared with other members of the contrast set, also permit long-distance agreement. For

example, in (59), which is repeated below, Fatima can be construed as the referent selected out of the contrast set ‘all students’.

(85) Nesi-r rok’-ƛ’o-r y-ay-n [nāzon
DEM.I-LAT heart-SUPER-LAT II-come-PST.nWIT [all.OS
c’alduqan-za-ƛ’āy pat’i hič’č’a ʕaq’luyaw
student-PL.OS-SUPER-ABL Fatima.ABS.II most clever
yäł-ru-łi].
be.PRS-PST.PTCP-NMLZ].ABS.IV
‘He remembered that FATIMA was the smartest among the students.’

Contrastive topics in Tsez are often marked with the enclitic *–gon,* and if an absolutive nominal with that enclitic appears in a clausal complement, long-distance agreement is necessary. Consider the following:[12]

(86) [Ø-ˢeɣe-ni-gon esiw Ø-äk’i-ru-łi] *pro* Ø-iy-r-ān.
I-young-DEF-CONTR.TOP sibling.ABS(.I) I-go-PST.PTCP-NMLZ I-know-CAUS-FUT.DEF
‘I will find out that the YOUNGER BROTHER has gone (there).’

Contrastive sets also play a role in the interpretation of discourse-linked phrases (including wh-words). It is possible to draw a distinction between discourse-linked interrogatives like *which person* (which implies the existence of a set of people from which one needs to make a choice) and regular (non-discourse linked) interrogatives such as *who,* which do not carry such an implication (see Pesetsky 1987 and much subsequent literature on this distinction; see also our discussion in CH. YY [Interrogatives]). Discourse-linked phrases imply the existence of a familiar set, and are therefore good candidates for topichood. On the other hand, discourse-linked phrases also have an interrogative interpretation, which makes them focus-like (see Radó 1997; Rizzi 2004 for a discussion of this interpretive duality). The topic interpretation allows discourse-linked wh-phrases to determine long-distance agreement, especially when the discourse-linking is made explicit by the presence of *which.* Two modifiers encode the meaning ‘which’ in Tsez: *nāsi* (lit.: where-ATTR) and *didiw.* In the following examples, the discourse-linked wh-phrase ‘which camel’ licenses long-distance agreement in (87), as does the wh-phrase ‘which old woman’, in (88):

(87) [Didiw ħumukuli b-äk’i-ru(-łi)] b-iy-r-ān.
what.ATTR camel.ABS.III III-go-PST.PTCP-NMLZ III-know-CAUS-FUT.DEF
‘I will find out which camel has left (from here).’ ((Xanno, nesisgon łˢono užin:17)

(88) Debe-r [nāsi ečru-ni ɣˢanabi y-äx-ru-łi]
2SG-LAT which old.one-DEF woman.ABS.II II-die-PST.PTCP-NMLZ
y-iy-x-an-ä?
II-know-PRS-NEG-INTERR
‘Don’t you know which old woman died?’

[12] As with regular topics, the presence of *–gon* on the embedded absolutive is often judged redundant.

Plain wh-words are normally not discourse-linked, but given a specific context, they can be interpreted as such. Thus, it is typically within sentences with plain wh-words in the embedded absolutive position that one finds variation between long-distance and properly local agreement. The presence of long-distance agreement with an embedded absolutive wh-expression implies a limited range of felicitous answers; wh-expressions that do not trigger long-distance agreement do not impose a finite set of possible answers on the question at hand. Thus, in extended contexts, regular wh-phrases can also receive a discourse-linked interpretation. For instance, in the following example, there is a clearly delimited group (two or three people), from whom a single member (the one who did the talking) must be selected. Although the wh-word is just a regular one (*šebi*), it can be interpreted as discourse-linked. Without such a context, the only acceptable agreement would be the properly local pattern, shown in (90):

(89) Q'ˤano-łˤono žek'u yisi-de dandir nex-no
two-three person.ABS.I DEM.I-APUD.ESS across come-PFV.CVB
šebi yisi-q xabaryä-ru-łi Ø-iy-x-ānu.
who.ABS(.I) DEM.I-POSS.ESS talk-PST.PTCP-NMLZ I-know-PRS-NEG
'Two or three people came up to him but (I) don't know who [among them] talked to him.'

(90) Šebi yisi-q xabaryä-ru-łi r-iy-x-ānu.
who.ABS DEM.I-POSS.ESS talk-PST.PTCP-NMLZ IV-know-PRS-NEG
'(I) don't know who talked to him.'

A non-discourse-linked wh-word always blocks long-distance agreement, regardless of what element has induced that agreement. The word 'why' is a typical interrogative expression that does not show discourse-linked properties. Compare (86) and the following example, where long-distance agreement with the absolutive topic is blocked by *šida* 'why':

(91) [Šida esiw Ø-äk'i-ru-łi] r-iy-r-ān/
why sibling.ABS(.I) I-go-PST.PTCP-NMLZ IV-know-CAUS-FUT.DEF/
*Ø-iy-r-ān.
I-know-CAUS-FUT.DEF
'I will find out why Brother left.'

Likewise, long-distance agreement with a discourse-linked absolutive is impossible, as shown in the following example:[13]

(92) Debe-r [šida nāsi ɣˤanabi y-äx-ru-łi]
2SG-LAT why which woman.ABS.II II-die-PST.PTCP-NMLZ
r-iy-x-ä/*y-iy-x-ä?
IV-know-PRS-INTERR/II-know-PRS-INTERR
'Do you know which woman died why?'

[13] In general, Tsez does not permit multiple wh-questions (see CH.YY [Interrogatives]), but a discourse-linked wh-phrase is compatible with another wh-phrase.

An utterance can have more than one topic, and these topics are hierarchically arranged (see Polinsky and Potsdam 2001; Polinsky 2002 for more discussion). The absolutive topic can only induce long-distance agreement when it is the highest topic in a given sentence. This is consistent with the locality condition discussed in section 5.2; the agreeing verb and the agreed-with noun phrase should not be separated by other material that may have topic properties. For example, (93) is a statement about what the girl did to the jam and tea, but the main topic is 'the girl', which is in the ergative case and therefore cannot license long-distance agreement, and although the absolutive in the embedded clause is also understood as a topic it cannot determine long-distance agreement.

(93) [Yedu kid-b-ä$_i$ [*pro*$_i$ wareniya magala-ƛ' r-iħ-no]
DEM girl-OS-ERG jam.ABS.IV bread-SUPER.ESS IV-put-PFV.CVB
čay b-uqˢäk'-ru-łi] r-ukay-s/*b-ukay-s.
tea.ABS.III III-hide-PST.PTCP-NMLZ IV-see-PST.WIT/III-see-PST.WIT
'I saw this girl spread the jam over bread and hide the tea.'

These examples underscore the fact that long-distance agreement in and of itself is a means of indicating that a given absolutive noun phrase is the main topic. We could therefore compare the use of long-distance agreement in Tsez to the marking of a constituent with a special topic particle, like Japanese *wa.* In those contexts where long-distance agreement is in principle possible, like in (93), its presence identifies the absolutive as the main topic, and its absence indicates that some expression other than the absolutive is the main topic.

The expression of reflexive and reciprocal meanings. Anaphora

1 General remarks

Tsez uses several means of expressing the identity of the primary participants in an event and, correspondingly, the identity of their denotations in a clause or sentence. The main strategies include: use of verbs with an inherently reflexive or reciprocal reading (section 2); use of complex reflexives/reciprocals dedicated to expressing the coreference between two noun phrases (section 3); use of the focus enclitic *–tow* to mark a pronoun or demonstrative coreferential with an antecedent (section 4). To anticipate the discussion below, complex reflexives/reciprocals are strictly local, and forms in *–tow* are used to track coreference across clauses.

2 Verbs with reflexive and reciprocal meaning

Many constructions that would be expressed as overt reflexives in some other languages are expressed as intransitives, i.e. lexical or intrinsic reflexives, in Tsez. In this respect, Tsez parallels English, except that Tsez overtly distinguishes transitive and intransitive verb stems, as we showed in CH. YY [VERB MORPHOLOGY]. Thus, the normal translation of 'Fatima is washing (herself) (in the river)' uses the intransitive verb *esanad-* 'wash' (cf. transitive *esad-* 'wash'), as in the example below:[1]

(1) Pat'i ker-ā y-esanay-xo.
Fatima.ABS.II river-IN.ESS II-wash-PRS
'Fatima is washing (herself) in the river.'

(2) Debi ɣ^{w}ˤay ħiħ-xo yoł.
2SG.GEN1 dog.ABS.III scratch-IPFV.CVB AUX.PRS
'Your dog is scratching (itself).'

Likewise, intransitive symmetrical predicates, discussed in CH. YY [Basic clause types], can readily assume a reciprocal interpretation. For example:

(3) ɣudes sasaq-āz-a elo-r-no r-ay-n … miλ'-bi
daily morning-DIST-IN.ESS there-LAT-and nIPL-come-PFV.CVB ram-PL.ABS.nIPL
r-iħanay-xosi yoł.
nIPL-fight-PRS.PTCP AUX.PRS
'Every day since morning, (two) rams go there and are fighting (with each other).' (ʕAliqilič:117)

In some cases other constructions are used, as in (4) and (5), which include transitive verbs, and (6), which illustrates a "locative transitive" (see CH. YY [Argument structure]):

[1] Compare the transitive counterpart of this verb in (64).

(4) ʕAl-ä k'ot'u y-ey-xo.
Ali-ERG beard.ABS.II II-shave-PRS
'Ali is shaving (himself).'

(5) Pat'-ä kočuri b-oy-x.
Fatima-ERG bangs.ABS.III III-do-PRS
'Fatima is making up her hair.'

(6) Kid-b-ä hiƛu kodi-q y-iħ-xo.
girl-OS-ERG comb.ABS.II hair-POSS.ESS II-put-PRS
'The girl is combing her hair.' (putting a comb to hair)

In all such instances, the reflexive or reciprocal interpretation is determined by context or general world knowledge.

3 Dedicated reflexive/reciprocal forms: Distribution within a clause

In this section, we discuss binding within a clause. For binding within a noun phrase, see Ch. YY [Noun phrase]. Unless explicitly stated below, compound reflexives are in complementary distribution with regular pronouns/demonstratives.

The use of a reflexive/reciprocal element does not affect the transitivity of a clause; the compound form appears in (non-subject) argument position, in the same case as an equivalent non-reflexive argument.

3.1 Reflexive/reciprocal formation

All reflexives and reciprocals in Tsez are complex, consisting of two parts. Tsez uses two strategies to derive complex reflexives and reciprocals, both of which involve repetition of the relevant pronoun or demonstrative (for details, see CH.YY [DEMS]). In one of these formations, the first component of the complex reflexive appears in the ergative, and the second component appears in the case required by the verb or postposition. The case of the compound reflexive is therefore expressed by the second component. For example, in (7a), the compound reflexive is in the poss-lative form, and in (7b) it appears in the absolutive. This formation is available for all cases other than the ergative.

(7) a. el-ä elu-qo-r
1PL-ERG 1PL-POSS-LAT
'to ourselves'

b. el-ä eli
1PL-ERG 1PL.ABS
'ourselves'

In the second formation, the order of the constituents in the compound reflexive is reversed, and the case called for by the verb or postposition in question appears on the first constituent; the second constituent is in the absolutive. This formation is available for all cases other than the ergative and the absolutive.

(8) a. elu-qo-r eli
1PL-POSS-LAT 1PL.ABS
'to ourselves'
b. debi mi
2SG.GEN1 2SG.ABS
'your own'

First- and second-person reflexives are formed using pronouns. Third person is expressed by demonstratives, and these demonstratives are used to form reflexives as well. For ease of presentation, we will be referring to all these forms as reflexives.

In the third-person singular, the reflexive consists of two forms of the demonstrative *ža*, the oblique stem of which differs by gender (*nes-* for gender I, *neł-* for all other genders). Thus, the third-person singular reflexive shows gender concord with the antecedent. Third-person plural uses the demonstratives *žedi* (gender I) and *žedu* (all other genders), also showing gender concord with the antecedent.

In addition to the use of pronouns (for first and second person) and demonstratives (for third person), Tsez uses compound forms with the noun *q'ˤim* 'head' to encode generic reflexives; such forms are only used with generic animate antecedents, for example:

(9) a. *pro*$_{arb}$ q'ˤim-ä q'ˤim-λ'o-r boko b-ay-r-xosi
self-ERG self-SUPER-ALL felt.cloak.ABS.III III-come-CAUS-PRES.PRT
(yoł).
be.PRS
b. *pro*$_{arb}$ q'ˤim-λ'o-r q'ˤim boko b-ay-r-xosi
self-SUPER-ALL self.ABS felt.cloak.ABS.III III-come-CAUS-PRES.PRT
(yoł).
be.PRS
'Everybody is looking out for Number One.' (li.: one brings a felt cloak for oneself)

(10) a. [*pro*$_{arb}$ q'ˤim-ä q'ˤim-e-s mec
self-ERG self-OS-GEN1 language.ABS.III
b-iy-r-ani-x] ħažetaw šebin (yoł).
III-know-CAUS-MASD-AD.ESS important thing.ABS.IV be.PRS
b. [*pro*$_{arb}$ q'ˤim-e-s q'ˤim mec
self-OS-GEN1 self.ABS language.ABS.III
b-iy-r-ani-x] ħažetaw šebin (yoł).
III-know-CAUS-MASD-AD.ESS important thing.ABS.IV be.PRS
'It is important to know one's own language.'

Plural reflexives can also receive a reciprocal interpretation, as shown in the translations below. In most cases, the choice between the reflexive and reciprocal readings is determined contextually. In the description below, for ease of exposition, we will be referring to the relevant forms as "reflexives," regardless of their potential reciprocal interpretation.

The compounds [*sidä sis-/sid*-nABS] and [*sid*-nABS *sis*] 'one another' have a dedicated reciprocal interpretation, just as their English counterparts do. These compounds also have two formations. In the first formation, the first component is the ergative *sidä*, and the second component takes the form called for by the verb or postposition. In the second formation, the first component appears in the form called for by the verb or postposition, and the second component is the invariable *sis* 'one'. For example:

(11) Žed-ä sidä sis žek'-si.
DEM.IPL-ERG RECP.ABS hit-PST.WIT
'They beat/hit each other.'

(12) ɣˤana-z-ä sis sida-r muri-bi teƛ-si.
woman-PL.OS-ERG RECP-LAT needle-PL.ABS.nIPL give-PST.WIT
'The women gave each other needles.'

In the discussion below, we will assume the information presented here and will only show the case of the entire reflexive, without identifying its component parts. The binding principles discussed in the subsequent sections pertain equally to all the types of anaphors presented in this section, namely pronominal reflexives, demonstrative reflexives, generic reflexives with *q'ˤim*, and reciprocals with *sis.*

3.2 Reflexives/reciprocals in intransitive clauses: The absolutive noun phrase as antecedent

Let us consider some simple cases first. With some principled exceptions to be discussed below, an intransitive absolutive argument can bind a reflexive in its own clause. In (13), the intransitive verb AGR-*ez*- 'look at' takes the absolutive subject and a super-lative adjunct; the reflexive appears in the super-lative form.

(13) a. (Di) dä-ƛ'o-r di y-ezu-s.
1SG.ABS(.II) 1SG.REFL.SUPER-LAT II-look-PST.WIT
'I (woman speaking) looked at myself.'

b. (Mi) dow-ƛ'o-r mi y-ezu-s.
2SG 2SG.REFL.SUPER-LAT II-look-PST.WIT
'You (addressing a woman) looked at yourself.'

c. Madina nełā neła-ƛ'o-r y-ezu-s.
Madina.ABS.II REFL.nI.SUPER-LAT II-look-PST.WIT
'Madina looked at herself.'

The opposite pattern is impossible: the super-lative cannot bind the absolutive argument. The ungrammaticality is pretty much the same as in the English translation of the following sentence:

(14) *Nełā ža Madina-ƛ'o-r y-ezu-s.
REFL.nI.ABS Madina-SUPER-LAT II-look-PST.WIT
("Herself looked at Madina.")

In (15), the intransitive predicate is the complex verb *šak* AGR-*oq*- 'doubt' ("be doubtful"):

(15) a. (Di) dä-ƛ'-āy di šak Ø-oq-xo.
1SG.ABS(.I) 1SG.REFL.SUPER-ABL doubtful I-become-PRS
'I (man speaking) doubt myself.'

b. (mi) dow-ƛ'-āy mi šak Ø-oq-xo.
2SG(.II) 2SG.REFL.SUPER-ABL doubtful I-become-PRS
'You (addressing a man) doubt yourself.'

c. ʕAli nesä nesi-ƛ'-äy šak Ø-oq-xo.
Ali.ABS.I REFL.I.SUPER-LAT doubtful I-become-PRS
'Ali doubts himself.'

The antecedent of the reflexive does not have to precede it; it can also follow, as shown below:

(16) Nesä nesi-ƛ'-äy šak Ø-oq-xo ʕAli.
REFL.I.SUPER-LAT doubtful I-become-PRS Ali.ABS.I
'Ali doubts himself.'

While the antecedent can occur in different positions in the clause, postverbal reflexives are dispreferred in elicitations, with judgments ranging from outright rejection to strong dispreference; we have not found postverbal reflexives in texts either.[2] (See more discussion of the postverbal domain in CH. YY [Word order].)

(17) a. ??/*ʕAli šak Ø-oq-xo nesä nesi-ƛ'-äy.
Ali.ABS.I doubtful I-become-PRS REFL.I.SUPER-LAT

b. ??/*Šak Ø-oq-xo ʕAli nesä nesi-ƛ'-äy.
doubtful I-become-PRS Ali.ABS.I REFL.I.SUPER-LAT

c. ??/*Šak Ø-oq-xo nesä nesi-ƛ'-äy ʕAli.
doubtful I-become-PRS REFL.I.SUPER-LAT Ali.ABS.I
('Ali doubts himself.')

An antecedent in the absolutive can bind a reflexive in the adnominal genitive modifying a constituent in the same clause:[3]

(18) a. (Di) däz di otax-ā zow-s.
1SG.ABS 1SG.REFL.GEN2 room-IN.ESS be.PST-PST.WIT
'I was in my room.'

b. (Mi) debe-z mi otax-ā zow-s.
2SG 2SG.REFL.GEN2 room-IN.ESS be.PST-PST.WIT
'You were in your room.'

[2] To anticipate the discussion in section 4 below, this is one of several points of divergence between compound reflexives and regular pronouns/demonstratives with the particle *–tow.*

[3] The examples in (19) include idiomatic expressions meaning 'to annoy', literally 'rise in the tooth' and 'attach oneself to the tooth'.

(19) a. ʕAli nesä nesi-z-tow k'ic-ā Ø-iz-äsi.
Ali.ABS.I REFL.I.GEN2-FOC tooth-IN.ESS II-rise-RES
'Ali annoys even himself.'

b. Es-na-bi žedä žedu-z k'ica-ƛ
sibling-PL-PL.ABS.IPL REFL.PL.GEN2 tooth-SUB.ESS
b-iti-s.
IPL-touch-PST.WIT
'The siblings annoy each other/themselves.'

c. ʕIsa-n ʕali-n žedä žedu-ƛ' raziyaw
Isa.ABS.I-and Ali.ABS.I-and REFL.PL-SUPER.ESS content
zow-n.
be.PST-PST.nWIT
'Isa and Ali were happy with each other/themselves.'

(20) Tawadi nesä nesi-z mež-ä kec-no.
Tawadi.ABS.I REFL.I-GEN2 bed-IN.ESS sleep-PST.nWIT
'Tawadi slept in his own bed.' (based on Ražbadinno, Tawadin:79)

And the absolutive can also antecede a reflexive inside a postpositional phrase:

(21) Babiw nesä nesi-z ɣʕutk-o-q šet'ur Ø-iči-x.
father.ABS.I REFL.I.GEN2 house-OS-POSS around I-stay-PRS
'Father is (somewhere) around his house.'

A compound reflexive is impossible with antecedents that are subconstituents of clause constituents. For example, in (22), the adnominal genitive cannot antecede the reflexive (note that because the noun 'bull' is gender III, there is no gender ambiguity in the interpretation of the reflexive; it can only refer to the teacher):

(22) *[Učitel-e-s is] nesä nesi-z roč-yo-x-āy b-egi-s.
teacher-OS-GEN1 bull.ABS.III REFL.I-GEN2 rope-OS-AD-ABL III-get.loose-PST.WIT
('The teacher$_i$'s bull broke away from his$_i$ rope.')

There are no restrictions on the animacy of the antecedent. The following examples illustrate inanimate antecedents:

(23) Dunyal neła-q ža šet'u b-uti-x.
earth.ABS.III REFL.nI.POSS.ESS around III-turn-PRS
'The earth turns around itself.'

(24) Yedu lak nełä neła-ƛ'-äy qiqi-x.
DEM paint.ABS.III REFL.nI-SUPER-ABL get.bad-PRS
'This paint is getting bad from/by itself.'

So far the pattern we see is unsurprising; the absolutive argument, which looks like a subject, binds reflexives in its own clause. However there are several subtypes of intransitive clauses where the absolutive cannot antecede a reflexive but can be bound by some other constituent. We turn to these clauses in the next section.

3.3 Reflexives/reciprocals in existential, possessive, and accidental clauses

Recall that existential, possessive, and accidental clauses include both an absolutive noun phrase and an additional expression denoting the scene (in existentials), possessor (in possessive clauses), or inadvertent agent (in accidental clauses)—these expressions can be characterized as obligatory adjuncts (see CH YY [Basic clause types]). The table below represents this schematically:

Table 2. Constructions with intransitive predicate and obligatory adjuncts

	Obligatory adjunct	ABS Argument	Predicate
Existential clause	Scene-setting expression	Existential pivot	BE
Possessive clause	Possessor (GEN or POSS-ESS)	Possessum	BE
Accidental clause	Inadvertent agent (POSS-ESS)	Patient	Unaccusative verb

In these clauses, the absolutive constituent can antecede a reflexive in any constituent other than the obligatory adjunct.

(25) Nełä neła-z ciq-qo bikori-aždah zow-n/
REFL.nI-GEN2 forest-POSS.ESS snake-dragon.ABS.III be.PST-PST.nWIT/
b-ići-n.
III-stay-PST.nWIT
'A/The evil snake$_i$ was in its$_i$ forest.'
NOT: 'There was an evil snake$_i$ in its$_i$ forest.'

(26) Nesä nesi-z idu žek'u yoł-ä?
REFL.I-GEN2 home person.ABS.I be.PRS.INTERR
'Is there someone$_i$ in his$_{j/*i}$ home?'

In the following example we see that the absolutive in a possessive clause cannot antecede a reflexive in the possessor genitive or in any other constituent of the possessive clause:

(27) *Nesä nesi-z k'et'u-s bet'erhan yoł.
REFL.I-GEN2 cat-GEN1 master.ABS.I be.PRS
('The cat's owner exists.')

Examples (28), (29) show that the absolutive cannot antecede a reflexive in the noun phrase denoting the inadvertent agent:

(28) *Eniw nełä neła-q/neła-q ža žek'-si.
mother.ABS.II REFL.nI-POSS.ESS hit-PST.WIT
('Mother accidentally hit herself.')

(29) *Kid nełä neła-z/neła-z ža eniw-q y-eč'e-ł-si.
girl.ABS.II REFL.nI-GEN2 mother-POSS.ESS II-cut-INTR-PST.WIT
("Her mother accidentally cut the girl.")

In contrast, scene-setting expressions in existentials, possessors in possessive clauses, and inadvertent agent noun phrases in accidental clauses can antecede reflexives, for example:

(30) Maˁqir-zo ciq-qo nełä neła-s bikori-aždah
far-OS forest-POSS.ESS REFL.nI-GEN1 snake-dragon.ABS.III
zow-n.
be.PST-PST.nWIT
'In the faraway forest$_i$ there was its$_i$ (own) evil snake.'

(31) Yiła k'et'u-s nełä neła-s bet'erhan yoł-ä?
DEM.nI cat-GEN1 REFL.nI-GEN1 master.ABS.I be.PRS-INTERR
'Does this cat have an owner?'

(32) Eniw-q nełä ža žek'-si.
mother-POSS.ESS REFL.nI.ABS hit-PST.WIT
'Mother accidentally hit herself.'

(33) Kid-be-q nełä neła-s/neła-s ža baša b-eč'e-ł-si.
girl-OS-POSS.ESS REFL.nI-GEN1 finger.ABS.III III-cut-INTR-PST.WIT
'The girl accidentally cut her own finger.'

While the absolutive noun phrase cannot bind the obligatory adjunct, it can antecede reflexives in other constituents. For example:

(34) Uži-s k'et'u nełä neła-z xoxoya-za-de yoł.
boy-GEN1 cat.ABS.III REFL.nI-GEN2 youngling-PL.OS-APUD.ESS be.PRS
'The boy has a cat$_i$ with its$_i$ kittens.'

3.4 Reflexives/reciprocals in clauses with cognition/perception verbs

Recall that the cognition/perception verbs discussed in Ch.YY [Basic clause types] take the lative experiencer and absolutive stimulus. Depending on the number of arguments (i.e. transitive versus ditransitive), these verbs show two different patterns of causativization, though the case-marking pattern is the same (CH. YY [Basic clause types, Section 6.3]). The patterns are as follows:

(35) Pattern 1: Transitive verb

affective:	Experiencer-LAT	Stimulus-ABS	V
	|	|	|
causative:	Agent-ERG	Stimulus-ABS	V-CAUS

(36) Pattern 2: Ditransitive verb

affective:		Experiencer-LAT	Stimulus-ABS	V
		|	|	|
causative:	Agent-ERG	Causee-POSS-ESS	Stimulus-ABS	V-CAUS

We find that the difference in causativization corresponds to differences in the way reflexive binding is structured. Psychological verbs which causativize following Pattern 1 ('know'-verbs,

see CH. YY [Basic clause types]) show the lative argument binding the absolutive, but not the other way around.[4]

(37) a. Irbahin-e-r nesir ža surat-yo-ł Ø-esu-s.
Ibrahim-OS-LAT REFL.I.ABS picture-OS-CONT.ESS I-find-PST.WIT
'Ibrahim found himself in the picture.'
b. *Irbahin nesä nesi-r/nesir ža surat-yo-ł Ø-esu-s.
Ibrahim.ABS REFL.I-LAT picture-OS-CONT.ESS I-find-PST.WIT

(38) a. Eniw-r neła-r ža šuλ'i-x.
mother-LAT REFL.nI.ABS forget-PRS
'Mother forgets about herself.'
b. *Eniw nełä neła-r/neła-r ža šuλ'i-x.
mother.ABS REFL.nI-LAT forget-PRS

(39) a. Yiła kid-be-r neła-r ža y-iy-x-ānu.
DEM.nI.OS girl-OS-LAT REFL.nI.ABS II-know-PRS-NEG
'This girl does not know herself.'
b. *Yedu kid nełä neła-r/neła-r ža y-iy-x-ānu.
DEM.nI.OS girl.ABS.II REFL.nI-LAT II-know-PRS-NEG

In contrast, those cognition and perception verbs that causativize as ditransitives, following Pattern 2 ('like'-verbs), allow binding both ways, from the lative to the absolutive and from the absolutive to the lative:

(40) a. Eniw-r neła-r ža y-ukay-s.
mother-LAT REFL. nI.ABS(.II) II-see-PST.WIT
'Mother saw herself.'
b. Eniw neł-ä neła-r y-ukay-s.
mother.ABS.II REFL.nI-LAT II-see-PST.WIT
'Mother saw herself.'

(41) a. Madina-r neła-r ža y-eti-x.
Madina-LAT REFL. nI.ABS(.II) II-like-PRS
'Madina loves herself.'
b. Madina neł-ä neła-r y-eti-x.
Madina.ABS.II REFL.nI-LAT II-like-PRS
'Madina loves herself.'

(42) a. ʕIsa-r-no ʕAli-r-no žedä žedu b-eti-x.
Isa-LAT-and Ali-LAT-and REFL.PL.ABS(.IPL) IPL-like-PRS
'Isa and Ali like each other/themselves.'
b. ʕIsa-n ʕAli-n žedä žedu-r b-eti-x.
Isa.ABS.I-and Ali.ABS.I-and REFL.PL.ABS-LAT IPL-like-PRS
'Isa and Ali like each other/themselves.'

[4] There is only one formation for the reflexive in the absolutive position, which explains the unique form used in the (a) examples here.

3.5 Reflexives/reciprocals in transitive and ditransitive clauses

In transitive and ditransitive clauses, the ergative noun phrase can antecede the reflexive in the absolutive position; the opposite pattern is impossible. For example:

(43) a. Eni-y-ä nełä ža duduɣ-ir-xo.
mother-OS-ERG REFL.nI.ABS.II berate-CAUS-PRS
'Mother is berating/scolding herself.'

b. *Eniw nełä nełä duduɣ-ir-xo.
mother.ABS.II REFL.nI-ERG berate-CAUS-PRS

(44) a. Es-na-z-ä žedä žedu-qo-r kaɣat-ya-bi
sibling-PL-PL.OS-ERG REFL.IPL-POSS-LAT letter-OS-PL.ABS.nIPL
r-eger-si.
nIPL-send-PST.WIT
'The siblings sent each other/themselves letters.'

b. *Es-na-bi žedä žedä eniw-qo-r b-eger-xo.
sibling-PL-PL.ABS.IPL REFL.IPL-ERG mother-POSS-LAT IPL-send-PRS
('The siblings send each other/themselves to Mother.')

(45) a. Xalq'i-m-ä … žedä žedu-s c'ik'iw ʕaƛ-no
people-OS-ERG REFL.IPL-GEN1 entire village.ABS.III-and
kuši-n.
demolish-PST.nWIT
'The people demolished their entire village.' (Yizałäy hič'č'a ixiw šebi yoł?:12)

b. Žed-ä xalq'i-mo-s c'ik'iw ʕaƛ-no
DEM.IPL-ERG people-OS-GEN1 entire village.ABS.III
kuši-n.
demolish-PST.nWIT
'They$_{j/*i}$ demolished the people$_i$'s entire village.'

A gap in the reflexive paradigm underscores the impossibility of another argument binding a reflexive in the ergative position; there are no reflexive forms of the ergative. For most nouns, the ergative coincides with the in-essive form, and in-essive reflexives are possible, but they cannot be used as ergatives.

If the antecedent is a subconstituent of the ergative noun phrase, reflexivization is impossible:

(46) *Učitel-e-z ɣ^{ʕw}ay-ä nesä ža ħan-si.
teacher-OS-GEN2 dog-ERG REFL.I.ABS bite-PST.WIT
('The teacher$_i$'s dog bit himself$_i$.')

In addition to serving as antecedent to a reflexive in the absolutive, the ergative noun phrase can also serve as the antecedent of a reflexive in other case forms, as illustrated in (48), or a reflexive which is a subconstituent of its clause-mate noun phrase. To illustrate the latter, in (48), the ergative antecedes the adnominal genitive in the absolutive noun phrase, and in (49), in the adnominal genitive of the poss-essive causee. In (50) the ergative serves as the antecedent to the adnominal genitive within a lative noun phrase:

(47) ʕAl-ä-n Irbahin-ä-n žedä žedu-ł-äy gazyat-ƛ'o
Ali-ERG-and Ibrahim-ERG-and REFL.PL-CONT-ABL newspaper-SUPER.ESS
t'et'er-xo.
read-PRS
'Ali and Ibrahim are reading about themselves/each other in the newspaper.'

(48) Nes-ä nesä nesi-s ħurmat b-oy-nč'u.
DEM.I-ERG REFL.I-GEN1 respect.ABS.III III-do-PRS.NEG
'He does not respect himself.'

(49) Sult'an-ä kino nesä nesi-z xex-za-q
Sultan-ERG movie.ABS.IV REFL.I-GEN2 child-OS-POSS.ESS
r-uka-r-si.
IV-see-CAUS-PST.WIT
'Sultan$_i$ showed a movie to his$_i$ children.'

(50) ʕAl-ä nes-ä nesi-z qizanyo-r ɣˢutku r-oy-s.
Ali-ERG REFL-GEN2 family-LAT house.ABS.IV IV-do-PST.WIT
'Ali$_i$ built a house for his$_i$ family.'

In ditransitive or causative-of-transitive clauses, the recipient/causee, which appears in an oblique form, cannot antecede a reflexive in the ergative position:

(51) *Es-na-za-qo-r žedä žedä kaɣat-ya-bi r-eger-si.
sibling-PL-PL.OS-POSS-LAT REFL.IPL-ERG letter-OS-PL.ABS.nIPL nIPL-send-PST.WIT
('The siblings sent each other/themselves letters.')

We already noted positional restrictions on reflexives (but not on their antecedents) in section 3.2. As in intransitive clauses, postverbal reflexives in transitive or ditransitive clauses are impossible or strongly disprefered. Compare the following examples:

(52) a. Neła ɣˢana-z-ä nełä neła-s uži Ø-exuy-s.
DEM.nI woman-OS-ERG REFL.nI-GEN1 boy.ABS.I I-kill-PST.WIT
b. ??/*Neła ɣˢana-z-ä Ø-exuy-s nełä neła-s uži.
DEM.nI woman-OS-ERG I-kill-PST.WIT REFL.nI-GEN1 boy.ABS.I
'That woman killed her own son.'

Again, as with intransitives, there are no restrictions on the animacy of the antecedent. Consider the following example:

(53) Hawa=baq'ˢ-oq-ä nełä ža r-aƛ'ir-nč'u.
weather-OS-ERG REFL.nI.ABS.IV IV-deceive-PRS.NEG
'Weather does not deceive itself.'

Though unable to bind the ergative, the absolutive can antecede reflexives in other constituents of a transitive/ditransitive clause. In the next pair of sentences, it is possible to tell which noun phrase antecedes the reflexive because the reflexive shows gender concord with the antecedent; in (54a), it matches the gender I feature of *užā* 'boy', and in (54b) it matches the gender II feature of the noun phrase *ac* 'door':

(54) a. Už-ä ac nesä nesi-z reka-re-d ħiš-si.
boy-ERG door.ABS.II REFL.I-GEN2 key-OS-INS lock-PST.WIT
'The boy locked the door with his key.'
b. Už-ä ac nełä neła-z reka-re-d ħiš-si.
boy-ERG door.ABS.II REFL.nI-GEN2 key-OS-INS lock-PST.WIT
'The boy locked the door with its proper (its own) key.'

If both the ergative and absolutive noun phrases anteceding a reflexive have the same gender feature, this may result in ambiguity, as in the next example. The preferred reading is still 'Ali', which means that the preferred association is between the reflexive and the structurally superior argument:

(55) ʕAl-ä wac'al-qo nesä nesi-ł-äy esir-si.
Ali-ERG cousin-POSS.ESS REFL.I-CONT-ABL ask-PSTWIT
'Ali$_i$ asked his cousin$_j$ about himself$_{i/?j}$.'

The marginal ability of a poss-essive noun phrase to antecede a reflexive, as in (55), disappears if the reflexive precedes the poss-essive; compare (55) and (56):

(56) ʕAl-ä nesä nesi-ł-äy wac'al-qo$_j$ esir-si.
Ali-ERG REFL.I-CONT-ABL cousin-POSS.ESS ask-PSTWIT
'Ali$_i$ asked his cousin$_j$ about himself$_{i/*j}$.'

In the alternating sentence where the reflexive is replaced with a regular demonstrative, the preference flips; now 'cousin' is the preferred antecedent, and this preference persists despite changes in word order:

(57) a. ʕAl-ä wac'al-qo nesi-ł-äy esir-si.
Ali-ERG cousin-POSS.ESS DEM.I-CONT-ABL ask-PSTWIT
b. ʕAl-ä nesi-ł-äy wac'al-qo esir-si.
Ali-ERG DEM.I-CONT-ABL cousin-POSS.ESS ask-PSTWIT
'Ali$_i$ asked his cousin$_j$ about him$_j$/??himself$_i$.'

In the potential construction, the poss-essive agent can antecede a reflexive in the absolutive position, but the opposite pattern is impossible, regardless of word order:[5]

(58) a. Doxtur-qo nesä nesi-s kumak b-oy-ł-xo.
doctor-POSS REFL.I-GEN help.ABS.III I II-do-POT-PRS
'The/A doctor is able to help himself.'
b. *Nesä nesi-q doxtur-e-s kumak b-oy-ł-xo.
REFL.I-POSS doctor-OS-GEN help.ABS.III III-do-POT-PRS

[5] In our earlier work (Polinsky and Comrie 2003) we reported the opposite pattern, but this finding did not withstand scrutiny.

c. *Doxtur-e-s kumak nesä nesi-q b-oy-ł-xo.
doctor-OS-GEN help.ABS.III REFL.I-POSS III-do-POT-PRS

In the biabsolutive construction, the agent, represented by the first absolutive noun phrase preceding the verb, can antecede a reflexive in the second absolutive position, as in (59a).[6] It can also appear postverbally and bind the preverbal reflexive, as in (59b).

(59) a. Pat'i nełä ža y-ži-y-oɣ-xo (y-ič-äsi)
Fatima.ABS.II REFL.nI.ABS II-bother-IPFV.CVB II-stay-RES
zow-n.
AUX.PST.-PST.nWIT
b. Nełä ža y-ži-y-oɣ-xo (y-ič-äsi) zow-n
REFL.nI.ABS II-bother-IPFV.CVB II-stay-RES AUX.PST.-PST.nWIT
Pat'i.
Fatima.ABS.II
'Fatima was discomfitting herself.'

However, the opposite pattern, whereby the reflexive appears before the preverbal absolutive antecedent, is impossible:

(60) *Nełä ža Pat'i y-ži-y-oɣ-xo (y-ič-äsi) zow-n.
REFL.nI.ABS Fatima.ABS.II II-bother-IPFV.CVB II-stay-RES AUX.PST.-PST.nWIT

3.6 Dedicated reflexive/reciprocal forms across clauses

Compound reflexives are locally bound; their antecedents have to be in the same clause (with the exception of reflexives in infinitive and masdar clauses, which we discuss below). Antecedent-reflexive coreference across the boundary of a tensed complement clause is impossible. This is shown below with an example involving a nominalized clause (61) and a clause introduced by the quotative particle *–ƛin* (62).[7] The embedded clauses are shown in brackets.

(61) Kid-be-r [eni-y-ä ža/*nełä ža beczi y-äy-ru-łi]
girl-OS-LAT mother-OS-ERG DEM.ABS/REFL.nI.ABS praise II-do-PST.PTCP-NMLZ
teq-no.
hear-PST.nWIT
'The girl$_i$ heard that mother praised her$_{i/j}$/*herself.'

(62) ʕAl-ä [Pat'-ä nesi-r/*nesä nesi-r kumak
Ali-ERG Fatima-ERG DEM-LAT/REFL.I-LAT help.ABS.III
b-oy-xosi-ƛin] eƛi-s.
III-do-PRS.PTCP-QUOT say-PSTWIT
'Ali$_i$ said that Fatima was helping him$_{i/j}$/*himself.'

[6] The lexical verb appearing in (59) and (60) is a compound AGR-*iž*-AGR-*oɣ*-, literally 'carry-pull'; each component of the compound shows gender agreement.
[7] Coreference in clauses introduced by *–ƛin* is actually more complex than described here, as it involves indexical shifts, which we discuss in CH. YY. For present purposes, it is only important that dedicated reflexives are not allowed in such clauses.

Likewise, antecedents cannot bind compound reflexives inside tensed relative clauses (shown in brackets). For example:

(63) *ʕAl-ä-n Irbahin-ä-n [žedä žedu-ł-āy gazyat-ƛ’o
Ali-ERG-and Ibrahim-ERG-and REFL.PL.I-CONT-ABL newspaper-SUPER.ESS
cäx-ru] šebin t’et’er-xo.
write-PST.PTCP thing.ABS.IV read-PRS
(‘Ali and Ibrahim are reading the thing written about themselves in a newspaper.’)

(64) *Kid-b-ä tungi [nełä neł-ä teł zäw-ru]-zo
girl-OS-ERG jug.ABS.III REFL.nI-IN.ESS-FOC inside be.PST-PST.PTCP-ATTR.OS
łi-d esay-s.
water-INS wash.TR-PST.WIT
(‘The girl washed the jug with the water that was in itself.’)

The only case where locality is not observed is across the boundary of an infinitival or masdar complement (see CH.YY [Complement clauses]). In Tsez, infinitival and masdar complements are transparent to a number of syntactic processes, so this behavior of reflexives is unsurprising. In the following example, the reflexive can refer back to Ali:

(65) ʕAl-ä Pat’i-q [nesä nesi-r kumak b-od-a] esir-xo.
Ali-ERG Fatima-POSS.ESS REFL.I-LAT help.ABS.III III-do-INF ask-PRS
‘Ali$_i$ is asking Fatima to help him$_i$ (lit.: himself).’

Also in contrast to participial relative clauses, compound reflexives can occur inside infinitival and masdar relative clauses, provided that they are bound from outside that clause:

(66) Kid-be-s [nełä neła-s at’ q’uq’-ani-r] łi
girl-OS-GEN1 REFL.nI-GEN1 dough.ABS.IV knead-MASD-LAT water.ABS.IV
r-oq-inč’i.
IV-become-PST.WIT.NEG
‘The girl$_i$ had no water to knead her$_i$ dough.’ (based on ʕAliqilič:43)

(67) [Nełä neła-s ac y-aˢɣ-ani-x] ħal ānu
REFL.nI-GEN1 door.ABS.II II-open-MASD-AD.ESS ability.ABS.III be.PRS.NEG
dä-z ečuy-s.
1SG-GEN2 grandmother-GEN1
‘My grandmother$_i$ cannot even open her$_i$ door.’

However, if the infinitival or masdar clause contains a noun phrase that is an appropriate antecedent for a reflexive inside that clause, the local antecedent takes precedence over the long-distance one. Consider the following sentence:

(68) Pat’-ä kul er-xo [eni-y-ä nełä neło-z
Fatima-ERG hope.ABS.III put-PRS mother-OS-ERG REFL.nI-GEN2
maduhal-e-r kumak b-od-a]
neighbor-OS-LAT help.ABS.III III-do-INF

'Fatima$_i$ hopes that Mother$_j$ will help her$_{j/??i}$ neighbor.'

Both potential antecedents of the reflexive, 'Fatima' and 'Mother' are of the same gender, so it is theoretically possible for *nełä nełoz* to be interpreted as coreferential with either of them. There is a strong preference, however, for interpreting the reflexive as coreferential with the subject of the infinitival clause rather than the subject of the matrix clause. We officially classify coreference with the matrix subject as "highly questionable," but for some lexicalizations, our consultants reject it altogether.

4 Reflexive/reciprocal interpretation of regular pronouns and demonstratives

In addition to the use of dedicated reflexive pronouns, Tsez can also convey reflexive/reciprocal meaning through the use of a regular pronoun or demonstrative combined with the emphatic enclitic *–tow* (dialectal variant *–tew).* In CH. YY [Particles], we identify *–tow* as one of the focus particles; it combines with noun phrases only. Its most general meaning can be described as the reversal of expectations: "based on expectations of the relationships between the referents or events, pick the (most) unlikely one." To illustrate the use of *–tow,* let us start with a simple example. Example (69a) presents a simple statement about the weather. The addition of *–tow* in (69b) turns it into a comment on an unexpected weather event.

(69) a. Isi y-ay-x.
snow.ABS.II II-come-PRS
'It is snowing.' (lit.: snow is coming)
b. Isi-tow y-ay-x.
snow.ABS.II-FOC II-come-PRS
'It is even SNOWING.'

In (70), the violation of expectation is stated explicitly in the sentence; the father does not want the son to go fishing, but the son still does. The noun phrase *uži* appears with the particle *–tow:*

(70) łˤono-äƛiru ɣude-ł-no babiw-s ħal
three-ORD day-CONT.ESS-TOP father-GEN1 state.ABS.III
b-ayr-inč'ey besuro-za-ƛ'o-r uži-tow Ø-ik'i-n.
III-bring-PFV.CVB.NEG fish-OS-POSS-LAT boy.ABS.I-FOC I-go-PST.nWIT
'On the third day, against Father's wish (lit.: not bringing Father's state), the SON went fishing.' (Besurozaqu:9)

This particle can also combine with the familiar compound reflexive. In (71a), the absolutive subject expectedly binds a reflexive in the adnominal genitive of the ad-essive noun phrase. In (71b), where that reflexive appears with the focus particle, the interpretation is that the boy was supposed to go with someone else (or on the road suggested by someone else); instead, contrary to expectation, he chose his own way.

(71) a. Uži nesä nesi-z huni-x Ø-ik'i-x.
boy.ABS.I REFL.I-GEN2 road-AD.ESS I-go-PRS

'The boy goes his own way.'

b. Uži nesä nesi-z-tow huni-x Ø-ik'i-x.
boy.ABS.I REFL.I-GEN2-FOC road-AD.ESS I-go-PRS
'The boy goes his OWN way.'

In (71b), the use of–*tow* does not alter the relationship between the antecedent and the compound reflexive, but when used with a regular pronoun or demonstrative, it does. Compare the following two sentences, which are close to (71a,b) but contain a simple demonstrative instead of a compound reflexive:

(72) a. Uži nesi-z huni-x Ø-ik'i-x.
boy.ABS.I DEM.I-GEN2 road-AD.ESS I-go-PRS
'The boy$_i$ goes his$_{j/*i}$ way.'

b. Uži nesi-z-tow huni-x Ø-ik'i-x.
boy.ABS.I DEM.I-GEN2-FOC road-AD.ESS I-go-PRS
'The boy$_i$ goes his$_{i/*j}$ own way.'

When a noun phrase that can serve as an antecedent occurs in the same clause as a pronoun, a standard expectation is that the two NPs point to different participants, as in the case of (72a). The addition of the focus particle reverses this standard expectation, and the result is a reading in which both expressions indicate the same referent, as in (72b).

Recall an earlier example, repeated below, which contained a compound reflexive whose antecedent was ambiguous, but showed preference for the ergative:

(73) ʕAl-ä wac'al-qo nesä nesi-ł-äy esir-si.
Ali-ERG cousin-POSS.ESS REFL.I-CONT-ABL ask-PSTWIT
'Ali$_i$ asked his cousin$_j$ about himself$_{i/?j}$.'

When it includes a regular demonstrative with –*tow,* the sentence has the opposite interpretation:

(74) ʕAl-ä wac'al-qo nesi-ł-äy-tow esir-si.
Ali-ERG cousin-POSS.ESS DEM.I-CONT-ABL-FOC ask-PST.WIT
'Ali$_i$ asked his cousin$_j$ about him$_j$/*himself$_i$.'

Compound reflexives and regular pronouns/demonstratives can be co-indexed with an antecedent regardless of word order. For expressions with –*tow*, word order matters. Compare example (74) with the following sentence, where the pattern of coreference has been reversed:

(75) ʕAl-ä nesi-ł-äy-tow wac'al-qo esir-si.
Ali-ERG DEM.I-CONT-ABL-FOC cousin-POSS.ESS ask-PSTWIT
'Ali$_i$ asked his cousin$_j$ about himself$_i$/*him$_j$.'

In addition to free variation within a single clause, *tow*-forms and dedicated reflexives are also in free variation in infinitival and masdar clauses (recall that dedicated reflexives can accept antecedents across the boundary of such clauses). Compare example (67) above, repeated below

as (76), and its *tow*-form counterpart:

(76) [Nełä neła-s ac y-aˁɣ-ani-x] ħal ānu
REFL.nI-GEN1 door.ABS.II II-open-MASD-AD.ESS ability.ABS.III be.PRS.NEG
dä-z ečuy-s.
1SG-GEN2 grandmother-GEN1
'My grandmother$_i$ cannot even open her$_i$ door.'

(77) [Neła-s-tow ac y-aˁɣ-ani-x] ħal ānu
DEM.nI-GEN1-FOC door.ABS.II II-open-MASD-AD.ESS ability.ABS.III be.PRS.NEG
dä-z ečuy-s.
1SG-GEN2 grandmother-GEN1
'My grandmother$_i$ cannot even open her$_i$ door.'

If the embedded infinitival or masdar clause contains a potential local antecedent for a regular pronoun or demonstrative, the addition of *–tow* tilts the balance of coreference in favor of the long-distance antecedent. For example, in the sentence below, which is only minimally different from (68) above, the use of *–tow* makes the interpretation 'Fatima's neighbor' most likely; the interpretation 'Mother's neighbor' is judged highly unlikely or even unacceptable. Therefore, in this context, the *tow*-form and the dedicated reflexive constitute a minimal pair.

(78) Pat'-ä kul er-xo [eni-y-ä neło-z-tow
Fatima-ERG hope.ABS.III put-PRS mother-OS-ERG DEM.nI-GEN2-FOC
maduhal-e-r kumak b-od-a]
neighbor-OS-LAT help.ABS.III III-do-INF
'Fatima$_i$ hopes that Mother$_j$ will help her$_{i/???j}$ neighbor.'

We have observed that dedicated reflexives are close to unacceptable in the postverbal position. No such restriction is observed with *tow*-forms, and in fact, quite a few of these reflexives occur postverbally. Compare the unacceptable example below, repeated from (52), and its counterpart with a *tow*-form*:*

(79) ??/*Neła ɣˁana-z-ä Ø-exuy-s nełä neła-s uži.
DEM.nI woman-OS-ERG I-kill-PST.WIT REFL.nI-GEN1 boy.ABS.I
('That woman killed her own son.')

(80) Neła ɣˁana-z-ä Ø-exuy-s neła-s-tow uži.
DEM.nI woman-OS-ERG I-kill-PST.WIT DEM.nI-GEN1-FOC boy.ABS.I
'That woman killed her own son.' (after Imnajšvili 1963:125)

Naturally, when two expressions occur in what seems to be a free variation, a question arises as to what kind of difference may exist between them. First of all, as we just noted, the distribution of dedicated reflexives is subject to more rigid structural constraints than the distribution of *tow*-forms, which is determined largely on the basis of plausible coreference. Second, there seems to be a preference for the use of dedicated reflexives in infinitival clauses. Other than that, as far as we can tell, the use of a *tow*-form entails greater emphasis; after all, this is the form associated with an element of surprise or violated expectations.

The particle *–tow* is offered in elicitations and also occurs in narrative texts. In addition, in texts we find another information-structural marker, the contrastive topic marker *–gon* (see CH.YY [Particles]). This particle can also be used to indicate coreference between an unlikely antecedent and a subsequent pronoun or demonstrative. For instance, *-gon* is used in the title of one of the Tsez fairy tales (Abdulaev and Abdulaev 2010), shown in (81), and it can be replaced by *–tow* in this context with no change in interpretation (Higgins, 1979):[8]

(81) xan-no nesi-s-gon ɬˤono uži-n
king.ABS.I-and DEM.I-GEN1-CONTR three boy.ABS.I-and
'the king$_i$ and his$_i$ three sons'

(82) xan-no nesi-s-tow ɬˤono uži-n
king.ABS.I-and DEM.I-GEN1-FOC three boy.ABS.I-and
'the king$_i$ and his$_i$ three sons'

To summarize the discussion in sections 3 and 4, reflexive/reciprocal relationships in Tsez are strictly local. With the exception of infinitival and masdar clauses, which do not have their own tense, reflexive/reciprocal relationships cannot be established across a clausal boundary. This raises the question of how, if at all, coreference is established across clauses. We discuss this question in a other chapters (CH. YY [Coordination] and CH. YY [Adverbial clauses]). To summarize the relevant discussion in that chapter, we show that regular pronouns and demonstratives are the primary devices used to establish coreference between two expressions in different clauses.

5 Copular clauses and reflexive/reciprocal expressions

Binding relations are put to the test in examples such as the English sentences below, where the reflexive is interpreted properly without the relevant antecedent (see Higgins 1979, Mikkelsen 2005 for a detailed discussion). In the examples below, the subject is a relative clause and the reflexive is contained in the predicate, but that predicate is not connected to the antecedent inside the relative clause. The phenomenon in question is known as connectivity: the binding relation is established in the absence of a clause-mate antecedent.

(83) [What she is good at] [is talking about herself].
SUBJECT PREDICATE

(84) [What every racetrack driver likes] [is his car].
SUBJECT PREDICATE

Across languages, constructions like these often use a relative clause in the subject position, and Tsez is no exception. Tsez has a headless relative clause, the details of which we discuss in CH. YY [Relative clauses]. The examples below show headless relatives with predicates in the present and past tense.[9] The wh-word in such headless relative clauses can be omitted:

[8] On the other hand, when asked whether *–gon* can replace *–tow* in the examples presented earlier in this chapter, our consultants prefer to keep *–tow.*
[9] See CH.YY [RCs] for details on headless relatives.

(85) (šebi) Zarema-r y-eti-xo-si
who.ABS.(II) Zarema-LAT II-like-PRS-ATTR
'whom Zarema likes'

(86) (šebi) Zarema-r y-et-ä-si
who.ABS.(II) Zarema-LAT II-like-PST.WIT.INTERR-ATTR
'whom Zarema liked'

When used as subjects of specificational clefts, these relative clauses can be followed by a predicate-internal reflexive. The case of the reflexive matches the case of the wh-word:

(87) (łu-r) ʕAl-ä micxir teƛ-ä-si nesä nesi-r
who-LAT Ali-ERG money.ABS.III give-PST.INTERR-ATTR REFL.I-LAT
zow-s.
be.PST-PST.WIT
'To whom Ali gave money was to himself.'

(88) (Šebi) Zarema-r y-eti-xo-si nełä ža (yoł).
who.ABS.(II) Zarema-LAT II-like-PRS-ATTR REFL.nI.ABS-FOC be.PRS
'Whom Zarema likes is herself.'

A dedicated reflexive can also alternate with a regular pronoun or demonstrative with the enclitic *–tow*, again matching in case with the wh-word. Although the form in *–tow* can be used in the predicate of the specificational cleft, it seems less preferred.

(89) (łu-r) ʕAl-ä micxir teƛ-ä-si nesi-r-tow
who-LAT Ali-ERG money.ABS.III give-PST.INTERR-ATTR DEM.I-LAT-FOC
zow-s.
be.PST-PST.WIT
'To whom Ali gave money was to himself.'

(90) (Šebi) Zarema-r y-eti-xo-si ža-tow (yoł).
who.ABS.(II) Zarema-LAT II-like-PRS-ATTR DEM.ABS-FOC be.PRS
'Whom Zarema likes is herself.'

However, there is one specific context where the form in *–tow* is the only option available. Recall that there is no ergative form of the reflexive (see section 3.5). When the wh-word in the headless relative is in the ergative case, it has to be matched in the predicate by the form in *–tow:*

(91) (łu) ʕAli-s mašina b-ecur-ä-si nes-ä-tow/
who.ERG Ali-GEN1 car.ABS.III III-break-PST.INTERR-ATTR DEM.I-ERG-FOC
*nes-ä nes-ä zow-s.
REFL.I-ERG be.PST-PST.WIT
'It was Ali himself who broke his car.' (lit.: who broke Ali's car was himself)

To conclude, Tsez has a whole range of words and phrases used to express coreference with a lexically specified antecedent. When the antecedent is local, Tsez uses compound reflexives

whose distribution is constrained by standard binding principles. When binding is impossible, the language resorts to coreference; under coreference, the focus particle *–tow* is used to constrain the range of possible antecedents.

Particles

Particles are short invariant words that serve a grammatical or information-structural function. None of the particles considered here affect the truth conditions of the sentence they occur in, either because the sentence is not a statement to begin with, or because only its conditions of use are affected. Most Tsez particles are enclitic (there are no proclitics in the language at all) and appear at the right edge of the word, following suffixes. Several particles can co-occur, and their order in such co-occurrences is not random. We are reasonably sure that the items described in this section are particles. Nevertheless, the distributional criteria are much less clear than for such categories as nouns and verbs, so it is not always easy to distinguish between enclitics and suffixes.[1]

1 Topic-marking particles

There are four main particles in this group: *-ƛa*, *-n(o),–gon,* and *-yoɬi.* All these particles have a variety of specific meanings that nevertheless can be subsumed under a more general meaning. With the exception of*–yoɬi,* the particles presented in this section do not combine with finite verbs. The same three particles participate in the derivation of quantified expressions whose paradigm is discussed in section 3.

Following Reinhart (1981), we define "topic" roughly as "the entity that the sentence adds new information about." We refer to this standard type of topic as an "aboutness topic". We also recognize the notion of "contrastive topic". This type of topic has been defined in very different terms by different researchers. Some scholars define it as a topic that is explicitly contrasted to some other members of a contrast set. Under such a definition, it is critical to know whether "topic" is understood as a semantic, syntactic, or pragmatic notion. Different approaches bring different assumptions about the nature of topichood, which in turn alter the notion of "contrastive topic" as well. There are also researchers who understand contrastive topic as its own basic information-structural category; for these authors, the definition of "topic" is irrelevant to the determination of a contrast (see Constant 2014: Ch. 1, for a discussion of these approaches). In this chapter, we adopt a maximally inclusive approach, assuming that as long as the conception of a contrastive set is available, one can talk about a contrastive topic.

1.1 –ƛa

The particle *–ƛa* marks external topics; its general meaning is 'as for; speaking of', but without the pronounced contrastive reading that is observed with the particles *–yoɬi* and *–gon*, discussed below.

External topics introduced by *–ƛa* can but do not necessarily have a structural representation in the clause. They normally appear at the left edge of the clause and can be separated from the rest of the clause by a pause. For example:

[1] See Forker (2013: 412) for similar difficulties in distinguishing enclitics and suffixes in Hinuq.

(1) Howži-ƛa # rˁałay r-od-a zaman b-ay-x.
now-TOP threshing.ABS.IV IV-do-INF time.ABS.III III-come-PRS
'Now is when it is time to do the threshing.' (Qˁay:62)

(2) Sult'an-ƛa # (nesi-s) wac'al-bi šahar-y-āy b-ay-s.
Sultan-TOP DEM.I-GEN1 cousin-PL.ABS.IPL city-OS-IN.ABL IPL-come-PST.WIT
'Sultan, his cousins came from the city.'

(3) Gulu-ƛa *pro* b-iqi-s, idu r-ac'-a
horse.ABS.III-TOP III-be.gotten-PST.WIT home IV-eat.TR-INF
šebin-wa ānu!
thing.ABS.IV-EMPH be.PRS.NEG
'A horse, he got, but there is nothing to eat at home!' (Imnajšvili 1963:273)

At the root clause level, topics can appear in the preverbal and postverbal domains. However, topics marked with *–ƛa* are infelicitous postverbally. Compare example (3), where the topic phrase can appear sentence-initially, with the following example:

(4) #*pro*/nes-ä b-iqi-s gulu-ƛa.
DEM.I-ERG III-be.gotten-PST.WIT horse.ABS.III-TOP
('A horse, he got.')

The particle *–ƛa* also appears attached to conditional and concessive converbs, which underscores the backgrounded, presuppositional status of the clauses headed by these converbs (see CH.YY [Coordination] and CH. YY [Adverbial clauses] for the topic status of conditionals). For example:

(5) [B-aq'ˁu micxir b-oq-näy]-ƛa qala-m-ä-ɣor-no
III-much/many money.ABS.III III-become-COND.I.CVB-TOP fortress-OS-IN-VERS-and
Ø-izi-n, Ø-ik'-ān di neł-dä-ɣor.
I-rise-PFV.CVB I-go-FUT.DEF 1SG.ABS(.I) DEM.nI-APUD-VERS
'If I had a lot of money I would go up into the fortress and go to her chambers
(lit.: …go toward by her).'
(K'ešonad mi, pakmos ʕabasi!:17)

(6) [Dice-gon nes-ä daʕba b-ič-ir-łin]-ƛa
how.much-CONTR.TOP DEM.I-ERG dispute.ABS.III III-stay-CAUS-CONCESS.CVB-TOP
žedu ʕenekizi b-oq-x-ānu.
DEM.ABS.IPL listen IPL-become-PRS-NEG
'No matter how much he disagreed, they would not listen.'

Expressions marked with *–ƛa* are limited to root clauses and cannot occur in clausal nominalizations in *–łi* or masdar/infinitival clauses (see CH. YY [Complement clauses]). Within root clauses, these expressions typically occur in the clause-initial position, as attested in the examples above.

The particle *–ƛa* is also used to derive indefinite expressions from interrogatives; this use is discussed in section 3 below.

1.2 –yoł̣i

The particle *–yoł̣i* is probably a contraction of *yoł* 'be.PRS' and the conditional marker *–ł̣i.* Like *–gon,* which is discussed in section 1.3 below, it marks contrastive topics, but its distribution is broader than that of *–gon*, as it can attach to finite verb. In combining with finite versb, *-yoł̣i* appears on the predicate of a clause that encodes the antecedent of a conditional, as shown below. For the details of *–yoł̣i* in conditionals, see CH. YY [Coordination].

(7) Mi y-ik'-äsi zow-s-yoł̣i, elo-tow łemu
2SG.ABS(.II) II-go-RES.PTCP be.PST-PST.WIT-CONTR.TOP there-FOC HYP.CONS
ƛäxu.
remain.FUT
'If you had gone there you would have stayed there.' (Besurozaqu:35)

In the rest of this section, we will concentrate on the use of *–yoł̣i* with constituents other than finite clauses. Since *–yoł̣i* expresses contrast, its use requires the establishment of a relevant contrastive set, either explicitly or contextually. In the following example, 'treasure' and 'wisdom' are explicitly compared, and *yoł̣i* appears with the noun phrase *aq'ˀlu* 'advice':

(8) Ukru dä-q-äy kʷaxa-tow łäy, aq'ˀlu-yoł̣i
silver.ABS.III 1SG-POSS-ABL soon-FOC stop.FUT advice.ABS.III-CONTR.TOP
net-äy netintow dä-de sadaq ƛäxu.
when-ABL always 1SG-APUD.ESS together remain.FUT
'Silver will run out quickly; but as for advice, it will stay with me forever.'
(Ħasanno Ħusenno:23)

In (9) and (10), the referent is selected from a defined set (several brothers) and explicitly contrasted to the other members of that set; again, *–yoł̣i* appears on the relevant noun phrase expressing contrastive topic:

(9) Ø-ˀeɣe-ni esi-y-ä-yoł̣i sisxoli riƛu-n
I-young-DEF sibling-OS-ERG-CONTR.TOP alone cultivated.land.ABS.IV-and
r-iƛi-n…
IV-plough-PFV.CVB
'As for the younger brother, he was ploughing alone…' (ƛelä bečed adiru miskin žek'u:4)

(10) ʕAliqilič-yoł̣i ɣudes neširu-x-āy babiw-z
Aliqilič.ABS.I-CONTR.TOP daily evening-AD-ABL father-GEN2
šuda-ƛ'o-r-t'a Ø-ik'i-x…
grave-SUPER-LAT-DISTR I-go-PRS
'As for Aliqilič, every evening he went to his father's grave…' (ʕAliqilič:17)

In the following example, *-yoł̣i* appears on a constituent whose referent is contrasted to a contextually inferable set; thus, it still carries the contrastive meaning. The implication in the response below is that someone (but not the speaker) went to the meeting:

(11) A: Sabraniya łiy-ä?
meeting.ABS.IV end-PST.WIT.INTERR

'Is the meeting over?'

B. Di-yołi y-ik'i-nč'us.
1SG.ABS(.II)-CONTR.TOP II-go-PST.WIT.NEG
'As for me, I (woman speaking) did not go.'

The particle *-yołi* is not limited to nominal constituents. It can occur with adverbial phrases as well. For example;

(12) Mečo-ł-xor-yołi di-tow y-ik'i-s.
field-CONT-VERS-CONTR.TOP 1SG.ABS.II-FOC II-go-PST.WIT
'To the fields, I am going.' (lit.: I am gone)

Like *–ƛa*, *-yołi* is limited to root clauses and cannot occur in clausal nominalizations in *–łi,* in masdar/infinitival clauses, or in relative clauses.

1.3 –gon

The particle *–gon* is formed by the emphatic particle *–go* (a borrowing from Avar) and the particle *–n(o)* just discussed. Synchronically, *–gon* seems to function as a single unit; however, there are instances when it still alternates with *–go*, in particular in concessive clauses, which will be discussed below.

The main function of *–gon* is to mark contrastive topic. In the following example, the contrast set is introduced explicitly, and *–gon* appears on the name of one of the members of that set.

(13) ƛ'ir-äy ƛ'iy-or y-oƛ'ˤu-n q'ˤano k'emot' y-āy,
above-ABL down-LAT II-fall-PFV.CVB two trunk.ABS.II II-come.FUT
sid-ä "qurun-qaran-ƛin" qäƛi, side-n-ä-gon
one-ERG qurun-qaran-QUOT shout.FUT one-DEF-ERG-CONTR.TOP
"c'urun-c'aran-ƛin" qäƛi.
c'urun-c'aran-QUOT shout.FUT
'Two trunks will fall down from above; one will make the noise "qurun-qaran", and the other, "c'urun-c'aran".' (Best'al kid:59)

In the example below, the preceding context implies a contrast (a character in a fairy tale is undergoing magical transformations), and the next sentence starts with a contrastive topic:

(14) Kurzak'u-ƛ'o-r-gon Oku-n Ø-uti-n neła-ł
falcon-SUPER-LAT-CONTR.TOP Oku.ABS.I-and I-turn-PRF.CVB DEM.nI-CONT.ESS
xizäy k'oƛi-n.
behind run-PST.nWIT
'Oku then turned into a falcon and rushed after it (=the horse).' (Babiwn, užin, Okun:60)

A contrast set may simply be presupposed, and the only overtly mentioned member can then appear marked with *–gon*, as in the following example, where 'we' is implicitly contrasted with other groups of people:

(15) Idu cezi-ya-x-or xabaryad-a q'arłizi b-oq-xo
at.home Tsez-OS-AD-LAT speak-INF effort 1PL-become-PRS
eli-gon.
1PL.ABS.IPL-CONTR.TOP
'We try to speak Tsez at home.'

In root clauses, contrastive topics with *–gon* are quite common postverbally; the postverbal placement is associated with the topic interpretation, and material marked with *–gon* is a good fit for this interpretation. For example:

(16) Ža armi-ł Ø-iži-n el-ā-za-gon.
DEM.ABS(.I) army-CONT.ESS I-lead-PST.nWIT there-ABL-DIST-CONTR.TOP
'They recruited him in the army right from there.'

All told, the placement of topics marked with *–gon* is not limited to the clause-initial position, as is reportedly common for contrastive topics in Nakh-Dagestanian languages (see Testelec 1997: 263-264 for a discussion). As he saw above, contrastive topics with *–yoł*i are also quite free in their placement. It remains to be seen whether this flexibility of linear position is observed in other languages of the family.

Another major function of *–gon* is to indicate repetition and/or addition (Imnajšvili 1963:273). A similar function is observed for the cognate particle in Hinuq (Forker 2013: 415-417). Although this function may be related to the contrastive topic function diachronically, we recognize it as a separate one in the current state of the language and refer to it as *additive* (ADD). Additive particles are attested cross-linguistically, for example, in Quechua (Cole 1982: 164, 169). The additive function is typically observed with numerals and adverbs; for example:

(17) Ø-ay-n sis-gon žek'u.
I-come-PST.nWIT one-ADD person.ABS.I
'Another person came.' (Imnajšvili 1963:273)

(18) k'ox-äƛiru-gon
twice-ORD-ADD
'for a/the second time'

(19) sasaq-gon
tomorrow-ADD
'again tomorrow'

(20) huday-gon
next-ADD
'(the) next day'

Some adverbs with the particle *–gon* are lexicalized and their meanings are quite different from the corresponding adverbs without *–gon*; for example *žigon* 'again' (*ži* 'now'), *dahawgon* 'more, more so' (*dahaw* 'a little'), *xizyogon* 'again' (*xizyo* 'afterwards'), AGR-*uygon* 'already' (AGR-*uy* 'really; indeed').

Finally, *-gon* is used to derive free choice expressions from interrogative words or phrases. Free-choice items with *-gon* are often found in concessive converbal clauses, as shown below (see also CH.YY [Relative clauses] and CH.YY[Adverbial clauses]). In this use, *-gon* alternates with the particle *–go.*

Some examples (see also example (6) above):

(21) Dice-gon bar-ä eƛi-łin šebin-kin
how.much-CONTR.TOP wife-ERG say-CONCESS.CVB thing.ABS.IV-FOC
r-oy-xo zow-nč'us.
IV-do-IPFV.CVB AUX.PST-PST.WIT.NEG
'No matter what his wife said, he did not lift a finger.'

(22) Dice-go zaħmat b-oq-łin
how.much-CONTR.TOP hardship.ABS.III III-become-CONCESS.CVB
yił-ä ziru-r xexoy kur-no.
DEM.nI-ERG fox-LAT youngling.ABS.III throw-PST.nWIT
'No matter how hard it was, it (the bird) threw its chick to the fox.'
(Debeq ža äsirus haqu yoč'ik'oƛ:7)

1.4 –n(o)

The particle *–n(o)* is structurally ambiguous between a linking particle (which we gloss as 'and') and a topic particle. The linking functions are all related, as we show below. The topic-marking function may be related to the linking functions diachronically, but in the current use, the two functions differ sufficiently; in particular, they exhibit different distributions. As a topic-marking particle, *-n(o)* is incompatible with the other topic particles discussed in this section: *-gon, -yołi,* and *–ƛa*, because its co-occurrence with them would lead to duplication in the expression of the same notion. Likewise, as a topic marker, *-n(o)* cannot co-occur with the focus particles *–tow* or *-kin* because topic and focus are mutually exclusive. However, when it is used as a linking element, *-n(o)* can combine with these particles. We will discuss examples of such co-occurrence in section 1.4.1.

The topic-marking *–n(o)* and the linking *–n(o)* can also themselves co-occur, for example, in the following exclamative utterance, where the coordinate phrase 'Musa and Ali' is marked as a single topic:

(23) Mus-ä-n(o-n) ʕal-ä-no-n ža-wa r-oy-n!
[Musa-ERG-and-TOP Ali-ERG-and]-TOP DEM.ABS.IV-EXCL IV-do-PST.nWIT
'For Musa and Ali, to do that!'

Based on these facts, we distinguish two separate homophonous particles, the linking *–n(o)* and the topic-marking *–n(o).*

1.4.1 The linking *–n(o)*

If *-n(o)* is used iteratively, it becomes a marker of coordination, conjoining all categories except finite verbs. This function is described in Ch.YY [Noun phrase], CH.YY [Adverbial clauses], and CH.YY [Nominalizations]. When joining constituents within a coordinate structure, *–n(o)* attaches to the head of each constituent and cannot be omitted.

A coordinate structure can be topicalized or focused with the help of information structure-marking particles. In such a case, an information structure-marking particle appears at the right edge of the relevant constituent, thus following the linking *–n(o).* For example, in (23) above, the entire coordinate noun phrase is topicalized, with the topic-marking *–n* following the final coordinating *–n.* In (24) below, the contrastive topic is the coordinate noun phrase *zirun k'et'un*, and the particle *–yoł̣i* appears after *–n*:

(24) [Ziru-n k'et'u-n]-yoł̣i boc'-ä-n zey-ä-n
fox.ABS.III-and cat.ABS.III-and-CONTR.TOP wolf-ERG-and bear-ERG-and
b-ay-ä[r]-ru dawla-ƛ' žin yoł-ƛax.
III-come-CAUS-PST.PTCP prey-POSS.ESS now be.prs- INDIRECT.EVID
'As for the fox and the cat, they came upon the prey that the wolf and the bear had brought.' (K'et'un zirun:31)

The next function of *–n(o)* can be characterized as that of ancillary clause linkage. In these contexts, *-n(o)* is optional, although native speakers prefer to see it used and comment on its presence as indicative of authentic, well-flowing texts.[2] In this function, *-n(o)* appears on the immediately preverbal constituent of a converbal clause; its presence underscores the connection between the converbal clause and the clause it is joined with (see CH.YY [Adverbial clauses]). The particle can be used in a similar way under the coordination of finite clauses, where it either appears on the immediate preverbal constituent (if the finite clause is verb final), or on the last constituent in the right periphery of the finite clause. The three contexts are illustrated below using similar baseline sentences. This function of *–n(o)* is dependent on linear order only and is not sensitive to constituency; for example, it can attach to a subconstituent of a light verb, to a clausal constituent, or to a subconstituent of a discontinuous noun phrase.

(25) *converbal clause—finite clause*
[Roƛiqur elu-r zurma-q'ili-s ruk'-no
at.midnight 1PL-LAT zurna-drum-GEN1 loud.sound.ABS.IV-and
teq-no] moƛ-a-x-āy č'ari-ł-si eli.
hear-PFV.CVB dream-OS-AD-ABL wake-INTR-PST.WIT 1PL.ABS
'At midnight we heard loud sounds of music and woke up.'

(26) *two finite clauses, the first clause is verb-final*
Roƛiqur elu-r zurma-q'ili-s ruk'-no
at.midnight 1PL-LAT zurna-drum-GEN1 loud.sound.ABS.IV-and
teq-si, moƛ-a-x-āy č'ari-ł-si eli.

[2] See also example **Error! Reference source not found.**) below, where *–n(o)* appears in the same function, on the constituent preceding the perfective converb.

hear-PST.WIT dream-OS-AD-ABL wake-INTR-PST.WIT 1PL.ABS
'At midnight we heard loud sounds of music, and woke up.'

(27) *two finite clauses, the first clause has postverbal material*
Roλiqur zurma-q'ili-s ruk' teq-si
at.midnight zurna-drum-GEN1 loud.sound.ABS.IV hear-PST.WIT
elu-r-no, moλ-a-x-āy č'ari-ł-si eli.
1PL-LAT-and dream-OS-AD-ABL wake-INTR-PST.WIT 1PL.ABS
'At midnight we heard loud sounds of music, and woke up.'

In both of these functions, that of a genuine coordination marker and that of ancillary clause linkage, *-n(o)* appears in contexts where two or more parallel structures are joined together. Its next function, conveying the meaning of 'also', 'too', is also contingent on parallelism, but that parallelism may be contextual rather than structural. For instance, in (28) and (29), parallelism is made explicit (the director does what father did; tomorrow will be like today), but in (30) and (31), parallelism is simply inferred.

(28) Babi-y-ä uži šahar-y-ā-r Ø-egera-ani-x ħukmu
father-OS-ERG boy.ABS.I city-OS-IN-LAT I-send-MASD-AD.ESS decision.ABS.III
b-oy-n director-y-ä-n b-oy-x.
III-do-PFV.CVB director-OS-ERG-and III-do-PRS
'Father decided to send the boy to the city and the director has decided that too.'

(29) Yaqˢuł Ø-iłe ɣude-n goλ'-a Ø-āy nesi-q
today I-similar tomorrow-and call-INF I-must DEM.I-POSS.ESS
di idu-ɣor.
1SG.ABS(.I) home-VERS
'Tomorrow also, just as today, he has to invite me home.' (Wasiyat:17)

(30) Zir-ä mati-n b-iqir-si.
fox-ERG duck.ABS.III-and III-catch-PST.WIT
'The fox caught a duck too.' (in addition to other catch)

(31) Bahana-r šeλ'ur-qo xur-no b-iħi-s.
reason-LAT clothing-POSS.ESS stain.ABS.III-and III-put-PST.WIT
'For looks, he made his clothing stained (with dirt) too.' (Λelä bečed adiru miskin žek'u:7)

In its linking function, *-n(o)* follows other particles. Compare example (24) above, where the coordinating *–n(o)* precedes *–yołi*, and the following example, where *–n* appears at the very right edge of the contrastive topic expression, connecting it to the rest of the utterance:

(32) łi ħaλ-a-yołi-n y-et-as yedu.
water.ABS.IV drink-INF-CONTR.TOP-and II-want-FUT DEM.ABS(.II)
'But/and I may need this at least for drinking water.' (Besurozaqu:14)

Similarly, in the next example, the linking *–n* follows the focus particle *–tow*:

(33) ɣowlo-tow-n Ø-ˢeɣe-ni esiw-n muk'ur Ø-oq-no.
there-FOC-and I-young-DEF sibling.ABS(.I)-TOP confess I-become-PST.nWIT

‘And right there, the youngest brother confessed to everything.’ (Xanno, nesisgon łᶜono užin:134)

The table below presents a summary of the functions associated with the linking *–n(o)*.

Table 1. Linking particle *–n(o)* and its functions

Main function and meaning	**Tied to a particular linear position**	**Tied to a particular structural position**	**Requires structural parallelism**
Coordinating conjunction ‘and’	No	Appears on the heads of conjoined phrases	Yes
‘and’ in clausal coordination and clause linkage	Yes: immediately preverbal (and last postverbal if available)	No	Yes
‘and’ = ‘also’	No	No	No

1.4.2 *-n(o)* as a topic marker

The next function of *–n(o)* is that of marking a sentence topic. Unlike the particle *–ƛa*, which marks what can be characterized as ‘aboutness’-topics or external topics, *-n(o)* marks topics that appear internal to clause structure. Topics marked with *–n(o)* are often (although not always) continuing topics, ones that can be expressed by a pronoun or a demonstrative.

In its topic-marking function, *-n(o)* can appear on a constituent in any position in the clause. We noted above that topics marked with *–ƛa* are unacceptable or at least strongly dispreferred in the postverbal position; topics marked with *–n(o)* are quite common postverbally. Postverbal constituents tend to have a topic interpretation (see CH.YY [Word order]), and the appearance of the topic marker reinforces that. When the marker appears with a postverbal pronoun or demonstrative, it is sometimes judged redundant, as in (35):

(34) a. Ukru-micxir-yo-z gonad-ƛ’o-r-no kʷeze b-oq-no ānu
gold-silver-OS-GEN2 pit-SUPER-LAT-TOP meet IPL-become-PST.nWIT NEG
žedu.
DEM.PL.ABS.IPL

b. Kʷeze b-oq-no ānu žedu ukru-micxir-yo-z
meet IPL-become-PST.nWIT NEG DEM.PL.ABS.IPL gold-silver-OS-GEN2
gonad-ƛ’o-r-no.
pit-SUPER-LAT-TOP
‘The pit with treasures they did not find.’ (based on Λelä bečed adiru miskin žek’u:29)

(35) a. Di-n ciq-e-s xan yoł.
1SG.ABS-TOP forest-OS-GEN1 king.ABS be.PRS

b. Ciq-e-s xan yoł di(-n).
forest-OS-GEN1 king.ABS be.PRS 1SG.ABS-TOP
‘I am the king of the forest.’

The topic particle *–n(o)* can appear on noun phrases, as in the examples above, and also on adverbial phrases and postpositional phrases, as illustrated below:

(36) Tax-mo-ƛ-no k'emot'-yo-s xal b-od-o.
couch-OS-SUB-TOP box-OS-GEN1 looking.ABS.III III-do-IMPER
'Under the couch, look for a/the box.'

In the absence of context, it is not always possible to tell apart the functions of *–n(o)* as a linking particle and as a topic marker. For example, in the next sentence, *-n(o)* appears on the noun phrase immediately preceding the converb *zown.* It could equally play a role as an ancillary clause-linkage device or mark the word *guluƛ'* as topic, which is warranted by the broader context (where that horse is introduced in the preceding sentence).

(37) Guluƛ'-no zow-n … Mus-ä čuret'
horse-SUPER-ESS-TOP/and climb-PFV.CVB Musa-ERG whip.ABS.III
b-ok'-nosi, … yizira-bi xan-zo ɣʿutk-o-x
III-hit-ANT.CVB DEM-PL.ABS.IPL king-GEN2 house-OS-AD.ESS
igo-r b-ay-n.
near-LAT IPL-come-PST.nWIT
'They took the horse, and as soon as Musa cracked his whip, they were at the king's palace.' (Qacis gulu:39)

The particle *–n(o)* is also used to derive universally-quantified expressions from interrogatives; we discuss this function in section 3 below.

1.5 Co-occurrence of topic-marked constituents in a sentence

The particles discussed in this section all encode information-structural distinctions and in that function, they cannot be added iteratively to a single constituent, so sequences such as *X-*gon-no*, *X-*no-yoł*i, etc. are impossible. The exception is the linking *–n(o)*, which can combine with information-structural particles (see section 1.4.1 above).

The particles do not co-occur on a single constituent, but it is possible for a clause to have a contrastive topic and a regular topic, as in the examples below. The usual linear order is as follows: external topic with *-ƛa*—contrastive topic—regular topic. It is rather unnatural for all three topic types to be represented in the same utterance, and the examples below show just two expressions at a time.

(38) a. Že-ƛa Abakar-ƛ'-āy-gon ader Ø-exu-s.
DEM.ABS(.I)-TOP Abakar-SUPER-ABL-CONTR.TOP before I-die-PST.WIT
'As for him, he died before Abakar.'
b. #Abakar-ƛ'-āy-gon že-ƛa ader Ø-exu-s.
Abakar-SUPER-ABL-CONTR.TOP DEM.ABS(.I)-TOP before I-die-PST.WIT

(39) a. Elo-gon č'ač'ane-ł-no [yā simindi
there-CONTR.TOP Chechnya-CONT.ESS-TOP or corn.ABS.IV
r-iƛ-a koƛ'i-nčey] [yā b-eynod-a b-iz-a
IV-cutlivate-INF know-PFV.CVB.NEG or IPL-work-INF IPL-rise-INF

koƛ’i-nčey] ʕuraw qwariłi r-ay-si
know-PFV.CVB.NEG numerous hardship.ABS.IV IV-come-PST.WIT
axo-s.
stomach-GEN1
‘And there, in Chechnya, because we did not know how to sow corn or how to run a household (lit.: to stand to work), we suffered a lot of hardship.’

b. #Č’ač’ane-ł-no elo-gon…
Chechnya-CONT.ESS-TOP there-CONTR.TO

(40) a. Ža nediw yäł-ru mi
DEM.ABS(.III) such be.PRS-PST.PTCP 2SG.ERG
b-iy-r-zaƛ’ … ozura-bi didiw yäł-ru-gon
III-know-CAUS-CAUSAL.I.CVB eye-PL.ABS.nIPL what be.PRS-PST.PTCP-CONTR.TOP
di-n r-iy-r-ān.
1SG.ERG-TOP IV-know-CAUS-FUT.DEF
‘You found out what it (=the camel) is like, and as for what its eyes are like, I will find that out.’ (Xanno, nesisgon łʿono užin:19)

b. …# di-n ozura-bi didiw yäł-ru-gon
1SG.ERG-TOP eye-PL.ABS.nIPL what be.PRS-PST.PTCP-CONTR.TOP
r-iy-r-ān.
IV-know-CAUS-FUT.DEF

(41) a. Ža-yołi žedu-r-no Ø-ukay-nč’us.
DEM.ABS(.I)-CONTR.TOP DEM.IPL-LAT-TOP I-see-PST.WIT.NEG
Him, they did not see.’

b. #Žedu-r-no ža-yołi Ø-ukay-nč’us.
DEM.IPL-LAT-TOP DEM.ABS(.I)-CONTR.TOP I-see-PST.WIT.NEG

The table below summarizes the main properties of topic-marking particles.

Table 2. Tsez topic-marking particles

	Contrastive	**Co-occurrence restrictions**	**Possible in embedded clauses**
-ƛa	No	Impossible on finite verbs	No
-yołi	Yes	None	No
-n(o)	No	Impossible on finite verbs	Yes
-gon	Yes	Impossible on finite verbs	Yes

2 Focus-marking particles

2.1 –kin

The particle *-kin* can be loosely translated as ‘indeed’ or ‘even’ and it can occur with any clausal constituent or subconstituent other than the finite predicate. Thus, it combines the properties of a general focus marker and a scalar focus marker. The general focus reading, close to ‘indeed,’ is typical of sentences in the affirmative, and in that function *–kin* is optional. The use of *–kin* alternates with strong prosodic prominence on the focused constituent, which is pronounced with a rising-falling intonation.

(42) Nesi-q(-kin) dey kid y-uy-xo-r
DEM.I-POSS.ESS-FOC-HYP 1SG.GEN1 girl.ABS.II II-true-AD-LAT
y-ut-ān.
II-turn-FUT.DEF
'He is the one that is able to return my daughter to me (lit.: to turn my daughter back).'

In this example, the constituent focused with *–kin* may appear fronted; however, the sentence-initial position is just what is typical of the potential agent in the poss-essive. The following example shows that the expression marked with *–kin* can appear either fronted or in a regular position appropriate for a given clausal constituent:

(43) a. Hudu(-kin) žed-ä ħal b-ay-r-xo.
so-FOC DEM.IPL-ERG health.ABS.III III-come-CAUS-FUT.DEF
b. Žed-ä hudu(-kin) ħal b-ay-r-xo.
DEM.IPL-ERG so-FOC health.ABS.III III-come-CAUS-FUT.DEF
'It is in such a way that they will be useful.'

The scalar focus reading 'even' is also possible in the affirmative, where it is often determined contextually. For example, the following sentence is ambiguous out of the context:

(44) Neła-s kuc-kin-wa b-igu ānu!
DEM.nI-GEN1 appearance.ABS.III-FOC-EXCL III-good be.PRS.NEG
'It is her face that is ugly!'
'Even her face is ugly!' (Bašiqˁoy:25)

But in the following sentence, the reading is clearly 'even', and there is no ambiguity:

(45) Sidä side-r sisini muhu-kin b-oƛi b-ok'-xo
RECP-LAT single seed.ABS.III-FOC III-half III-hit-IPFV.CVB
zow-n.
AUX.PST-PST.nWIT
'They used to split even a single seed to share with each other.' (Zirun, ɣˁʷadin:3)

Overall, the scalar function of the particle *–kin* is particularly apparent in negative contexts. In such contexts, *-kin* has the meaning 'even; at least' and often marks negative polarity items or expressions that are interpreted as such. However, the negative reading is contributed by the verbal negation in this case, not by *–kin* itself.

(46) B-oƛik'u-ni-gon sida q'orol ɣˁana-za-s
III-half-DEF-CONTR.TOP one.OBL widowed woman-OS-GEN1
kuła r-od-a-ce-kin ʕeze b-oq-no ānu.
sleeve.ABS.IV IV-make-TERM.CVB enough III-become-PFV.CVB be.PRS.NEG
'From the other half (of the hide), they could not even make a sleeve for the (giant) widow.' (Yizałäy hič'č'a ixiw šebi yoł?:17)

(47) Bišʷa r-ac'a-kin Ø-utik'-x-ānu.
food.ABS.IV IV-eat.TR-INF-FOC I-manage-PRS-NEG

'I cannot even manage to eat.'

(48) Nes-ä xabar-kin b-oy-nč'u.
DEM.I-ERG story.ABS.III-FOC III-do-PST.WIT.NEG
'He did not say a word.'

(49) Eniw razi y-oq-xo zow-n-ānu ža
mother.ABS.II agree II-become-IPFV.CVB AUX.PST-PST.nWIT-NEG DEM.ABS(.II)
sid-xo-kin y-egir-ani-x.
one-AD.ESS-FOC II-send-MASD-AD.ESS
'Mother refused to give her away in marriage to any suitor.' (Allahes ašuni:11)

As a scalar particle, *–kin* is used to derive negative polarity items from interrogatives and from universally quantified expressions (see section 3 below).

2.2 -tow

The emphatic particle *–tow* is widely used and combines with all categories except the finite form of the verb. Its characterization is similar to the characterization of its Hinuq counterpart offered by Forker (2013: 423), who writes that "the overall function of *=tow* is the expression of emphasis and contrast. It highlights linguistic items that contradict the expectations of the hearer." Although a precise semantic analysis of *–tow* is rather elusive, two properties are important in defining the meaning of this particle: the notion of contrast and the notion of reversal of expectations.

The particle is commonly found with adverbial phrases and adverbial clauses (with the latter, it attaches to the converbal predicate), where it serves to intensify the expression of place, manner, location, or reason conveyed by the adverbial. This emphatic nature of *–tow* becomes clear from the comparison of bare adverbials to adverbials accompanied by the particle:

(50) a. hudayziko
'the next day'
b. hudayziko-tow
next.day-FOC
'the very next day'

(51) a. lil-yo-x
shore-OS-AD.ESS
'at the river-bank/at the shore'
b. lil-yo-x-tow
shore-OS-AD.ESS-FOC
'right at the river bank/shore, at the very edge of a river bank/shore'

(52) a. nedur
'so; in such a way'
b. nedur-tow
so-FOC
'exactly that way'

(53) a. dahaw
'a little; some'
b. dahaw-tow

a.little-FOC
'a tiny bit'

Below we present examples of *–tow* combining with the converb predicate of adverbial clauses:

(54) Howža ƛeli b-äy-run-tow, neła-s eniw
DEM.nI lamb.ABS.III III-do-IMM.CVB-FOC DEM.nI-GEN1 mother.ABS(.III)
b-exu-s.
III-die-PST.WIT
'As soon as the lamb was born, its mother died.' (Xanno, nesisgon łʕono užin:75)

(55) Xan-e-s kid-gon ʕiyay-x-tow ʕiyay-x
king-OS-GEN1 girl.ABS.II-CONTR.TOP cry-IPFV.CVB-FOC cry-IPFV.CVB
zown-n.
AUX.PST-PST.nWIT
'As for the king's daughter, she was crying her eyes out (lit.: really crying cried).'
(Qacis gulu:14)

(56) B-ex-ur-a-tow b-ex-ur-xo yił-ä di!
III-die-CAUS-INF-FOC III-die-CAUS-PRS DEM.nI-ERG 1SG.ABS(.III)
'It (=the cat) is going to kill me (=the wolf)!' (K'et'un, zirun...:28)

(57) B-iš-ƛ'oräy-tow b-ex-ur-ān yizi.
Ipl-eat.intr-DUR.I.CVB-FOC IPL-CAUS-FUR.DEF DEM.IPL.ABS
'They will die right away, while they are eating.' (Qacis gulu:40)

When used with noun phrases, *-tow* often serves to express the notion that the referent's participation is unexpected, out of the ordinary, or surprising. For example, (58) can be used in response to a request to look for something; the expectation is that the speaker will do the looking, and the speaker rejects that assumption.

(58) Mež-ä-tow xal b-od-o!
2PL-ERG-FOC looking.ABS.III III-do-IMPER
'You yourselves go look.'

Example
(59) implies that the father is opposed to marrying the girl to the speaker:

(59) Di-ƛa mi y-ow-ān … debe-z-tow
1SG.ERG-CONTR.TOP 2SG.ABS(.II) II-take-FUT.DEF 2SG-GEN2-FOC
babi-y-ä y-egir-näy.
father-OS-ERG II-send-COND.CONV
'As for me, I will of course marry you if only your father would agree to give you to me in marriage.' (Qacis gulu:12)

Finally, the following sentence can only be uttered if there was no wind in the forecast.

(60) Łaci=muši-tow r-izi-s.
wind.ABS.IV-FOC IV-rise-PST.WIT

‘A strong wind blew.’ (implication: unexpectedly)

The role of *–tow* as an expression of the reversal of expectations is particularly apparent in its use with pronouns and demonstratives, which need to be associated with a cross-clausal antecedent. There are several core cases where *–tow* helps establish and maintain coreference. First, as we discuss in CH.YY [Complement clauses], if a potentially ambiguous pronoun in a finite complement clause is marked with the focus enclitic *–tow*, only the shifted interpretation is possible. Compare (61a) and (61b) for first person pronouns. In (61a), both readings of *däq* are possible: in the first reading, *däq* points to the speaker (indexical reading) and the other, it indexes the attitude holder (shifted reading). In (61b), only the shifted reading is possible. The particle therefore reinforces whatever interpretation is less expected or likely:

(61) a. Nes-ä [dä-q q’ˁanoquno ƛeb yoł-ƛin]
DEM.I-ERG 1SG-POSS.ESS forty year.ABS.III be.PRS-QUOT
eƛi-s.
say-PST.WIT
‘He said that I was 40 years old.’
‘He$_i$ said that he$_i$ was 40 years old.’
b. Nes-ä [dä-q-tow q’ˁanoquno ƛeb yoł-ƛin]
DEM.I-ERG 1SG-POSS.ESS-FOC forty year.ABS.III be.PRS-QUOT
eƛi-s.
say-PST.WIT
‘He$_i$ said that he$_i$ was 40 years old.’ (SR)
NOT: ‘He$_i$ said that I was 40 years old.’ (IR)

In a related pattern of use, *-tow* accompanies demonstratives and pronouns to establish a coreferential reflexive/reciprocal interpretation in non-local contexts, namely across clauses (recall that compound reflexives are strictly local; see CH.YY [Reflexives and anaphora]). Compare the ill-formed compound reflexives in relative clauses and the licit use of a *tow*-form in the parallel examples:

(62) a. *ʕal-ä-n Irbahin-ä-n [žedā žedu-ł-āy gazyat-ƛ’o
Ali-ERG-and Ibrahim-ERG-and REFL.PL.I-CONT-ABL newspaper-SUPER.ESS
cāx-ru] šebi-n t’et’er-xo.
write-PST.PTCP something.ABS.IV-INDEF read-PRS
(‘Ali and Ibrahim are reading the thing written about themselves in a newspaper.’)
b. ʕal-ä-n Irbahin-ä-n [žedu-ł-āy-tow
Ali-ERG-and Ibrahim-ERG-and DEM.PL.I-CONT-ABL-FOC
gazyat-ƛ’o cāx-ru] šebi-n t’et’er-xo.
newspaper-SUPER.ESS write-PST.PTCP something.ABS.IV-INDEF read-PRS
‘Ali and Ibrahim are reading the thing written about themselves in a newspaper.’

(63) a. Kid-b-ä tungi [nełä neł-ä teł zāw-ru]-zo
girl-OS-ERG jug.ABS.III REFL.nI-IN.ESS inside be.PST-PST.PTCP-ATTR.OBL
łi-d esay-s.
water-INS wash-PST.WIT
(‘The girl washed the jug with the water that was in itself.’)

b. Kid-b-ä tungi [neł-ä-tow teł
girl-OS-ERG jug.ABS.III DEM.nI-IN.ESS-FOC inside
zāw-ru]-zo łi-d esay-s.
be.PST-PST.PTCP-ATTR.OBL water-INS wash-PST.WIT
'The girl washed the jug with the water that was in it.'

In (64a), in the absence of *–tow*, the demonstrative in the complement clause is interpreted ambiguously (as referring to Ali or to a third party); in (64b), the form with *–tow* is interpreted as referring to Ali and Ali only:

(64) a. ʕAl-ä [Pat'-ä nesi-r kumek
Ali-ERG Fatima-ERG DEM.I-LAT help.ABS.III
b-oy-xosi-ƛin] eƛi-s.
III-do-PRS.PTCP-QUOT say-PST.WIT
'Ali$_i$ said that Fatima was helping him$_{i/j}$.'
b. ʕAl-ä [Pat'-ä nesi-r-tow kumek
Ali-ERG Fatima-ERG DEM.I-LAT-FOC help.ABS.III
b-oy-xosi-ƛin] eƛi-s.
III-do-PRS.PTCP-QUOT say-PST.WIT
'Ali$_i$ said that Fatima was helping him$_{i/*j}$.'

The antecedent and the *tow*-form can be separated by more than one clause:

(65) ʕAl-ä eƛi-x [Irbahin-e-r r-iy-x [Pat'-ä
Ali-ERG say-PRS Ibrahim-OS-LAT IV-know-PRS Fatima-ERG
nesi-r-tow kumek b-oy-xosi-ƛin]].
DEM.I-LAT-FOC help.ABS.III III-do-PRS-QUOT
'Ali$_i$ says that Ibrahim knows that Fatima is helping him$_i$.'

If only one noun phrase can be construed as the antecedent of a *tow*-form across clauses (either because it is the only antecedent present, or because the gender feature on the demonstrative matches the gender feature of that noun phrase alone), the grammatical function of the antecedent does not matter. If, however, there are several potential antecedents present, their structural relationship appears to play a role. The noun phrase that occupies the higher structural position is the likeliest antecedent for coreference across clauses if the coreferential pronoun or demonstrative appears without *-tow*. The addition of *–tow* again serves to reverse this expectation, and the coreference is established with the less likely antecedent: one in a lower structural position. For instance, in (66a), the ergative subject is a better antecedent than the poss-essive argument; but in (66b), the presence of *-tow* on the demonstrative reverses that expectation in favor of the poss-essive:

(66) a. Tawad-ä nesi-s roƛ'i b-äq-ru-ni
Tawadi-ERG DEM.I-GEN love.ABS.III III-become-PST.PTCP-DEF
kid Ražbadin-qo y-uka-r-no.
girl.ABS.II Rajbadin-POSS.ESS II-see-CAUS-PST.nWIT
'Tawadi$_i$ showed Rajbadin$_j$ the girl that he$_{i/??j}$ had fallen in love with.'

(based on Ražbadinno Tawadin:96)

b. Tawad-ä nesi-s-tow roƛ'i b-äq-ru-ni
Tawadi-ERG DEM.I-GEN-FOC love.ABS.III III-become-PST.PTCP-DEF
kid Ražbadin-qo y-uka-r-no.
girl.ABS.II Rajbadin-POSS.ESS II-see-CAUS-PST.nWIT
'Tawadi$_i$ showed Rajbadin$_j$ the girl that he$_{j/??/*i}$ had fallen in love with.'
(based on Ražbadinno Tawadin:96)

2.3 –uy

The interpretation of the particle AGR-*uy* is close to 'indeed, certainly'; we will characterize it as a validator particle (VAL) which indicates a strong degree of certainty on the part of the speaker. The particle agrees with the absolutive argument of the clause:

(67) Huł b-uy neł-ä micxir b-iqir-si.
yesterday III-VAL DEM.nI-ERG money.ABS.III III-catch-PST.WIT
'It was indeed yesterday that she received the money.'

This particle has the properties of a second-position clitic; it attaches to the right edge of the first clausal constituent (not necessarily the first word in a clause).[3] In the next two examples, the first constituent is a single word:

(68) Micxir b-uy huł b-iqir-si neł-ä.
money.ABS.III III-VAL yesterday III-catch-PST.WIT DEM.nI-ERG
'It was indeed (the) money that she received yesterday.'
(69) B-iqir-si b-uy micxir neł-ä huł.
III-catch-PST.WIT III-VAL money.ABS.III DEM.nI-ERG yesterday
'She did receive the money yesterday.'

In the following examples, the validator clitic follows an entire adverbial, infinitival, or masdar clause:

(70) [Xex-z-ä xabar teq-er-no] b-uy b-ič-ix.
child-OS-ERG story.ABS.III hear-CAUS-PFV.CVB III-VAL III-stay-PRS
'The children were listening with rapt attention.' (lit.: stayed indeed listening to the story)
(71) [Gut kur-a] r-uy r-oq-si peʿč.
smoke.ABS.II throw-INF IV-VAL IV-begin-PST.WIT furnace.ABS.III
'The furnace began to smoke really bad.'
(72) [Masukuw-ā-ɣor Ø-ik'-ani-x] b-uy kul er-xo ʕal-ä.
Moscow-IN-VERS I-go-MASD-AD.ESS III-VAL hope.ABS.III put-PRS Ali-ERG
'Ali hopes to go to Moscow indeed.'

AGR-*uy* can appear only once in a clause, so the following sentence is ungrammatical:

[3] In narrative texts, we have found several examples where AGR-*uy* does not appear at the edge of the first constituent, but these are judged awkward when tested in elicitations.

(73)	*Huł	b-uy	neł-ä	micxir	b-uy	b-iqir-si.
	yesterday	III-VAL	DEM.nI-ERG	money.ABS.III	III-VAL	III-catch-PST.WIT

AGR-*uy* resembles the validator clitics that have been described for Quechua (see Cole 1982: 164-168). As in Quechua, the Tsez validator clitic associates with the focus of the clause, is limited to root clauses, and can only occur once in a clause. A priori, there is no pragmatic or semantic reason that a focus expression should be limited to the root clause. We hypothesize that the restriction has to do with the structural size of the root clause as compared to the embedded clause; the latter may not have a structural position in which to host the focused constituent.

3 Topic and focus particles in the formation of quantified expressions

3.1 The formation of quantificational expressions

The particles *–ƛa, -n(o), -gon,* and *–kin* serve to derive quantified expressions from interrogative words/expressions and from the numeral *sis* 'one'. The derivation is extremely regular, as the table below shows.

Table 3. Tsez quantificational expressions

Interrogat-ive	**Mean-ing**	**Existential**	**Universal**	**Negative polarity *any***	**Negative polarity *any***	**Free choice *any***
Šebi[4]	What/ Who	Šebi-ƛa	(Šebi-n)	Šebi-kin	Šebi-n-kin	Šebi-gon
Šow	What/ who	Šow-ƛa	(Šow-no)	Šow-kin	Šow-no-kin	Šow-gon
Nā	Where	Nā-ƛa	Nā-n	Nā-kin	Nā-n-kin	Nā-gon
Nāsi	Which$_{DET}$	Nāsi-ƛa	Nāsi-n	Nāsi-kin	Nāsi-n-kin	Nāsi-gon
Didiw	What one/ Which one	Didiw-ƛa	Didiw-no	Didiw-kin	Didiw-no-kin	Didiw-gon
Neti	When	Neti-ƛa	Neti-n/ Neti-non	Neti-kin	Neti-n-kin	Neti-gon
Dice	How much	Dice-ƛa	Dice-no	Dice-kin	Dice-no-kin	Dice-gon
Šomo	How many	Šomo-ƛa	Šomo-no	Šomo-kin	Šomo-no-kin	Šomo-gon
Šida	Why	Šida-ƛa	--	Šida-kin	--	Šida-gon
Didur	How	Didur-ƛa	Didur-no	Didur-kin	Didur-no-kin	Didur-gon
Sis	One	---	Sis-no	Sis-kin	Sis-no-kin	---

If a given form changes according to case, the particle always follows the case endings; for example:

(74) a. šebi-ƛa
what-TOP
'something'

b. łina-qo-r-ƛa
what.OBL-POSS-LAT-TOP
'to something'

(75) a. nā-r-kin
where-LAT-FOC
'to nowhere'

b. na-z-āy-kin
where-DIST-ABL-FOC
'from nowhere'

However, if two quantificational forms are coordinated, the linking *-n(o)* follows the particles:

[4] *Šebi* and *šow* are dialectal variants.

(76) nā-r-kin-no na-z-āy-kin-no
where-LAT-FOC-and where-DIST-ABL-FOC-and
'to nowhere and from nowhere'

3.2 An overview of the series

The topic particle *–ƛa,* which we gloss as indefinite in this function, combines with interrogative expressions to form existential expressions with the core meaning 'some'. Such existential expressions are possible in any type of clause, be it declarative, interrogative, or exclamative. For example:

(77) a. łu-ƛa debe-ƛ' xal b-oy-s.
who.ERG-INDEF 2SG-SUPER.ESS looking.ABS.III III-do-PST.WIT
'Someone was looking for you.'
b. łu-ƛa däw-ƛ'o xal b-oy-ä?
who.ERG-INDEF 1SG-SUPER.ESS looking.ABS.III III-do-PST.WIT.INTERR
'Was someone looking for me?'

When used in a negative clause, existential expressions do not acquire a negative polarity interpretation:

(78) Šomo-ƛa surat xec-ač'in.
some-INDEF picture.ABS.III leave-FUT.NEG
'Several pictures won't last (lit.: be left).'
NOT: 'No pictures will last.'

The topic particle *–n(o)* derives universally quantified expressions, as shown in (79), with the exception of the form *šebin,* which is lexicalized in the meaning 'thing' and cannot be used to denote 'all' (the word *nāsi* is used in its stead)—compare (80).[5] We gloss*–n(o)* in this function as universal (UNIV):

(79) Meši-bi nā-r-no k'oƛi-x zow-s.
calf-PL.ABS.nIPL where-LAT-UNIV run-IPFV.CVB AUX.PST-PST.WIT
'The calves were running in all directions (everywhere).'
(80) Nāzon yedu … łoč-ya-ƛ' y-oɣ-xo
all.ERG DEM.ABS(.II) dance-OS-SUPER.ESS II-pull-IPFV.CVB
zow-n.

[5] The expressions involving *na-* 'where' vary depending on the spatial form, indicating stative location and direction toward/away from a reference point. In addition, in the universal series we find the form *naysinan* 'everywhere', which historically was probably compositional, as shown below:

(i) nāy-si-na-n
where.ABL-ATTR-DEF.OBL-TOP

AUX.PST-PST.nWIT
'Everybody (lit.: all) was inviting her to dance.' (Bašiqˢoy:29)

The universal reading is often reinforced by the focus particle *–tow*, as shown in (81) Meši-bi nā-r-no-tow k'oλi-x zow-s.
calf-PL.ABS.nIPL where-LAT-UNIV-FOC run-IPFV.CVB AUX.PST-PST.WIT
'The calves were running all over the place.'
(82):

(81) Meši-bi nā-r-no-tow k'oλi-x zow-s.
calf-PL.ABS.nIPL where-LAT-UNIV-FOC run-IPFV.CVB AUX.PST-PST.WIT
'The calves were running all over the place.'
(82) Nāzon-tow yedu … łoč-ya-λ' y-oɣ-xo
all.ERG-FOC DEM.ABS(.II) dance-OS-SUPER.ESS II-pull-IPFV.CVB
zow-n.
AUX.PST-PST.nWIT
'Everybody was inviting her to dance.'

In some instances, the topic particle and the particle *–tow* seem no longer synchronically divisible from the interrogative. This is the case with the expression *netintow* 'always', which includes *neti* 'when' and *-n* and *–tow*. (In example (8) above we present it as a unit.)

Negation takes scope over universal expressions, thus giving them the flavor of negative polarity items. For example:

(83) Neti-n t'ut'-λ'o-r-kin reλ'a r-iz-ir-inč'u nes-ä.
when-UNIV fly-SUPER-LAT-FOC hand.ABS.IV IV-rise-CAUS-PST.WIT.NEG DEM.I-ERG
'He can't say boo to a goose.' (lit.: never lifted his hand over a fly)

The particle *–gon/-go* derives free-choice expressions which regularly appear in concessive clauses. Examples of such clauses can be found in CH.YY [Adverbial clauses]. See also example (6) earlier in this chapter.

The particle *-kin* serves as a marker of negative polarity items; it is used to derive two sets of negative polarity *any,* one formed from interrogatives, the other from universal expressions. Regardless of their morphological make-up, the expressions with *-kin* carry existential quantificational force.

The system presented here is reminiscent of indeterminate expressions in such languages as Japanese or Korean (see Haspelmath 1997; Shimoyama 2008; Giannakidou 2000; Gil and Tsoulas 2009). In Japanese and Korean, indeterminates receive the interrogative interpretation when they associate with the overt interrogative particle (which is attached to the predicate). Tsez indeterminates also receive their interrogative interpretation in the presence of an interrogative operator; however, recall that the interrogative may not always have a morphological realization (see CH.YY [Interrogatives]).

The presence of two series of negative polarity items is cross-linguistically less common. The interrogative-based series is a typical one, and there are multiple cross-linguistic correlates to it, including the Japanese and Korean systems just mentioned (see Haspelmath 1997: Ch.8 for further cross-linguistic parallels). The universal-based series is less typical, although elements of such polarity systems are observed even in familiar languages like English, where *at all* is a negative polarity item, or French, where *tout à fait* is also widely used under negation. Partial doubling of negative polarity items is observed in Mandarin, where *wh*-words may function as polarity-sensitive items of some kind and carry an indefinite meaning, but there is also another NPI-like element whose morphological form is based on 'all' (*ren-he*); see Hsieh (2012). Likewise, in Turkish, certain polarity items are based on universally quantified expressions (Kornfilt 1997: 126-128). In Tsez, however, the paradigm is almost complete, and universal-based negative polarity items are not limited to adverbials. In the following subsection, we present more details of the two series of negative polarity items.

3.3 Negative polarity items

The two series derived with the particle *–kin* overlap in their interpretation but show systematic differences in distribution. They are summarized in the following table, and we illustrate them below.

Table 4. Differences in the distribution of interrogative-based and universal-based negative polarity items in *–kin*

	Universal-based NPIs	**Interrogative-based NPIs**
Occurrence in infinitival or masdar clauses under matrix negation	Yes	No
Occurrence as an adnominal modifier	Yes	No
Co-occurrence with the adverbial *t'ok'aw/t'ok'ow* 'further; more'	Yes	No
Occurrence in negative imperatives (prohibitives)	Yes	No
Occurrence in generic statements	No	Yes

Infinitival clauses and masdar clauses are transparent to binding and negation, so a negative predicate that dominates such clauses can license a negative polarity item inside them. The polarity items licensed in this way are always based on universal expressions. For example:

(84) a. Nā-r-no-kin b-ik'-a koλ'-inč'i žedu-r.
where-LAT-UNIV-FOC IPL-go-INF know-PST.WIT DEM.IPL-LAT
'They did not know where to go.' (lit.: they did not know anywhere to go to)

b. *Nā-r-kin b-ik'-a koλ'-inč'i žedu-r.
where-LAT-FOC IPL-go-INF know-PST.WIT DEM.IPL-LAT

Just as negative polarity items can be licensed across the infinitival or masdar boundary in the verbal domain, they can be licensed across the noun phrase boundary in the nominal domain. We thus find adnominal modifiers, expressed either by a genitive or an attributive phrase, licensed by

matrix negation. Again, only universal-based negative polarity items are possible. Consider the following example, where one type of genitive negative polarity item is illustrated, and see example (88) below for the same pattern with the attributive *didiw:*

(85) łina-s-no-kin/*łina-s-kin pikru ānu dey.
what-GEN1-UNIV-FOC/what-GEN1-FOC thought.ABS.III be.PRS.NEG 1SG.GEN1
'I have no idea.'

In negative clauses with the adverbial *t'ok'ow/t'ok'aw*, only universal-based negative polarity items are possible; the general meaning is that of *any more* in English. Compare the clause with this adverb in (85a), in which only one type of polarity itemsis possible, and the clause without *t'ok'ow* in (85b), where both types are allowed:

(86) a. Žed-ä łа-ł-no-kin/*łа-ł-kin t'ok'ow
DEM.IPL-ERG who-CONT.ESS-INDEF-FOC/who-CONT.ESS-FOC more
ħalikataw šebin r-oy-n-ānu.
vile thing.ABS.IV IV-do-PST.nWIT-NEG
'They no longer did bad things to anyone.' (Λelä bečed adiru miskin žek'u:32)
b. Žed-ä łа-ł-no-kin/łа-ł-kin ħalikataw
DEM.IPL-ERG who-CONT.ESS-INDEF-FOC/who-CONT.ESS-FOC vile
šebin r-oy-n-ānu.
thing.ABS.IV IV-do-PST.nWIT-NEG
'They did not do bad things to anyone.'

It appears that the role of *t'ok'ow/t'ok'aw* is to reinforce the notion that the set whose existence is negated is complete.

Negative imperatives (prohibitives) co-occur only with universal series-based quantified expressions, thus:

(87) Mi łina-q-no-kin/*łina-q-kin ħayran
2SG.ABS(.II) what-POSS.ESS-UNIV-FOC/what-POSS.ESS-FOC surprised
y-äq-no.
II-become-PROH
'Don't be surprised by anything.'
(88) łu-qo-r-no-kin/*łu-qo-r-kin didiw-no-kin/*didiw-kin
who-POSS-LAT-UNIVE-FOC /who-POSS-LAT-FOC what-UNIV-FOC/what-FOC
xabar b-äy-no.
conversation.ABS.III III-do-PROH
'Don't talk to anyone.' (lit.: don't make any conversation with anyone)

Non-specific negative polarity expressions, derived from interrogatives, are found in generic statements, such as the proverb in (89). In such contexts, universal-based negative polarity items do not occur:

(89) Žek'u-z rok'-ƛ'o-si łа-r-kin/*łа-r-no-kin

person-GEN2 heart-SUPER.ESS-ATTR who-LAT-FOC/who-LAT-UNIV-FOC
r-iy-xosi ānu.
IV-know-PRS.PTCP be.PRS.NEG
'You can never see into another heart.' (lit.: Another person's heart is not known to anyone)

Both types of negative polarity items can occur in conditional clauses with negative predicates, but they give rise to different readings in that context. Compare the following contrast:

(90) Ža łu-qo-r-kin xabary-inč'i-näy mi-gon
DEM.ABS who-POSS-LAT-FOC speak-NEG-COND.CVB 2SG.ABS-CONTR.TOP
šibaw maduhal-qo-r/*nesi-qo-r xabarayad-a r-āy.
every neighbor-POSS-LAT/DEM.I-POSS-LAT speak-INF IV-must
'If s/he does not talk to anyone, you should speak to all the neighbors/*to him.'

(91) Ža łu-qo-r-no-kin xabary-inč'i-näy mi-gon
DEM.ABS who-POSS-LAT-UNIV-FOC speak-NEG-COND.CVB 2SG.ABS-CONTR.TOP
šibaw maduhal-qo-r/nesi-qo-r xabarayad-a r-āy.
every neighbor-POSS-LAT/DEM.I-POSS-LAT speak-INF IV-must
'If s/he does not talk to anyone/someone, you should speak to all the neighbors/to him.'

In (90), the use of the interrogative-based negative polarity item in the antecedent of the conditional gives rise to a meaning that is close to free choice ("if she does not talk to anyone/whoever"); this expression is interpreted as non-specific and the determiner *nesiqor*, coindexed with the negative polarity item in the apodosis of the conditional, is infelicitous, the same way *it* is infelicitous in the following English example:

(92) I have not been able to find any good cobblers in this town, but she found one/#him.

In contrast, the negative polarity item in) can be interpreted existentially, and coindexation with *nesiqor* is possible.

Finally, universal-based negative polarity items can be interpreted as meaning 'not a single X', as in example (93) below.

(93) a. ła-r-no-kin y-ukay-nčey yedu kid idu-ɣor
who-LAT-UNIV-FOC II-see-IPFV.CVB.NEG DEM girl.ABS.II home-VERS
y-ik'i-n.
II-go-PST.nWIT
'Without a single person seeing her, the girl went into the house.' (Bašiq'oy:30)
b. ła-r-kin y-ukay-nčey yedu kid idu-ɣor
who-LAT-FOC II-see-IPFV.CVB.NEG DEM girl.ABS.II home-VERS
y-ik'i-n.
II-go-PST.nWIT
'Without anyone seeing her, the girl went into the house.' (Bašiq'oy:30)

The differences between the two series of negative polarity items are quite subtle, and further work may be needed to determine if additional distinctions exist.

4 Clausal particles

Most of the particles discussed so far can be defined negatively by their inability to associate with finite verbs (the only exception above is the particle *–yoł*, which combines with finite verbs). The particles discussed in this section are in essence clausal; they often attach to the predicate or some other constituent, but their non-truth-conditional import extends to the entire utterance. Regardless of their attachment site, they all share the same property: namely, they can only appear in root clauses.

4.1 –čo , -če(y)

The general meaning of *-čo/-če(y)* is 'indeed, already, definitely, let's'; it puts special emphasis on the command, question, or exclamation, regardless of its attachment site. It is possible that *čey* is actually a combination of *–čo* and *–ey* (see section 4.2 below), but currently *-čo* and *–čey* are used interchangeably, so any diachronic connection is obscured.

This particle appears with verbs in the imperative or optative, and with interrogative verbs (cf. Imnajšvili 1963: 270). For example:

(94) Hay hor-o-čo, babi-la-bi.
hey come-IMPER-EMPH father-DIMIN-PL.ABS.IPL
'Come, come my dears.' (ʕAliqilič:1)

(95) Nāsin xalq'i b-ay-oƛ-čey.
all people.ABS.IPL IPL-come-OPT-EMPH
'Let all the people come in!'

(96) Šebi-čo di r-od-ān, nā-r-čo k'oƛ-ān?
what.ABS.IV-EMPH 1SG.ERG IV-do-FUT.DEF where-LAT-EMPH run-FUT.DEF
'What oh what will I do, where oh where will I go?' (C'irdux:51)

The particle *-čo/-če(y)* does not occur in simple declarative clauses, which is probably due to the incompatibility of its meaning with the meaning of such clauses.

In interrogative clauses the particle appears either on the verb or on the interrogative expression:

(97) a. Šebi-čey yił-ä r-ädi?
what.ABS.IV-EMPH DEM.nI-ERG IV-do.FUT
b. Šebi yił-ä r-ädi-čey?
what.ABS.IV DEM.nI-ERG IV-do.FUT-EMPH
'Really, what can she do?'

The particle can also appear on interjections associated with vocatives and exclamatives (see Ch.YY [Exclamatives]).

(98) Way-čo, baħarči, Ø-egi-x-wa mi dä-q.

oh.dear-EMPH brave.man I-tear.away-PRS-EXCL 2SG.ABS.I 1SG-POSS.ESS
'Oh brave man, I cannot hold on to you!' (ʕAliqilič:154)

Unlike some other verbal particles, *-čo/-če(y)* can be doubled in an utterance; compare (98) and (99):

(99) Way-čo, baħarči, Ø-egi-x-wa mi-čo dä-q.
o.dear-EMPH brave.man I-tear.away-PRS-EXCL 2SG.ABS.I-EMPH 1SG-POSS.ESS
'Oh brave man, I cannot hold on to you!'

4.2 –ey

This particle appears only in root interrogatives and is possible in both *yes-no* questions and *wh*-questions. It usually follows the verb or another constituent marked with the interrogative suffix *-(y)ä*, but it can also occur on interrogative words, as in (101b) below. When combining with the interrogative suffix, *-ey* causes the *ä* in that suffix to be deleted, which suggests that *-ey* is a genuine suffix rather than a particle. However, we still chose to include it in this chapter, given its irregular occurrence and the general meaning of vagueness, doubt, or uncertainty that it adds to the interpretation of a question.[6] For example, the disjunctive question in (100b) is minimally different from its counterpart in (100a) in being less precise and implying that the speaker is not quite certain as to what s/he is seeing:

(100) a. Elo ʕomo-yä gulu-yä?
there donkey.ABS.III-INTERR horse.ABS.III-INTERR
'Is it a donkey or a horse there?'
b. Elo ʕomo-y-ey gulu-y-ey?
there donkey.ABS.III-INTERR-UNCERT horse.ABS.III-INTERR-UNCERT
'Could it possibly be a donkey or a horse there?' (Imnajšvili 1963:270)

If a question is not disjunctive, the particle can appear only once, either on the predicate or on the *wh*-word, as shown below:

(101) a. Šebi neła-r ela-q žukłi
what.ATTR DEM.nI-LAT 1PL-POSS.ESS badness.ABS.IV
r-oq-ān-ey?
IV-become-FUT.DEF-UNCERT
b. Šebi-ey neła-r ela-q žukłi
what-UNCERT DEM.nI-LAT 1PL-POSS.ESS badness.ABS.IV
r-oq-ān?
IV-become-FUT.DEF
'What kind of misfortune (bad thing) could we arrange for her?' (Beqes ʕUneyzat:39)

In this last example, the particle *–ey* appears on the verb in the future definite form, and the potential agent (the poss-essive) is indeed first plural. However, with this particle, the usual

[6] Imnajšvili (1963:270) characterizes this particle as marking "indirect questions", but based on the examples he provides, it conveys indecision and uncertainty nonetheless.

restriction of future definite to the first person does not hold, and the highest argument could be second or third person; for example:

(102) Žaqˢuł-gon nā-r-ey mi dä-q-āy
today-CONTR.TOP where-LAT-UNCERT 2SG.ABS(.I) 1SG-POSS-ABL
Ø-ok'ł-ān?
I-escape-FUT.DEF
'Where oh where can you escape from me today?' (C'irdux:80)

4.3 –wa, -ba

The particle *wa (-ba)* functions as an optional marker of exclamatives. The overall function of *–wa* is to reinforce the exclamative nature of the utterance, but we have not been able to determine its more specific semantic contribution. The particle *–wa* is compatible with the particle *-čo/-če(y)* discussed above.

This particle can appear on the predicate of the exclamative, as in (103a), or on some other constituent of an exclamative clause, as in (103b). It cannot, however, be doubled, as (103c) shows. It is possible in negative exclamatives, as shown in (104) and (105):

(103) a. Šahar-y-a-ɣor Ø-ik'-a-wa!
city-OS-IN-VERS I-go-INF-EXCL
b. Šahar-y-a-ɣor-wa Ø-ik'-a!
city-OS-IN-VERS-EXCL I-go-INF
'Oh, to go to the city!'
c. #Šahar-y-a-ɣor-wa Ø-ik'-a-wa!
city-OS-IN-VERS-EXCL I-go-INF-EXCL

(104) Way-čo, baħarči, Ø-egi-x-wa mi dä-q.
o.dear-EMPH brave.man I-tear.away-PRS-EXCL 2SG.ABS.I 1SG-POSS.ESS
'Oh brave man, I cannot hold on to you!' (ʕAliqilič:154)

(105) Idu r-ac'-a šebin-wa ānu!
home IV-eat.TR-INF thing.ABS.IV-EMPH be.PRS.NEG
'There is nothing to eat at home!' (Imnajšvili 1963:273)

Furthemore, *-wa* can follow another particle; in the next example, it attaches to the particle *-ƛax* (see section 7 for the discussion of *-ƛax*):

(106) ƛoˢr-e-ł-no axran-łi r-od-er-xo-ƛax-wa!
war-OS-CONT.ESS-TOP guard-NMLZ.ABS.IV IV-do-CAUS-PRS-INDIRECT.EVID-EXCL
'In wartime, they apparently still need the work of guards!'

4.4 –da

The particle *–da* expresses the speaker's certainty about the future and can be translated as 'maybe'. It occurs only in clauses whose predicate is in the definite future. As with the particle *–ey* (section 4.2 above), the usual restriction of future definite to first person does not apply in the

presence of *-da,* and hypothetical sentences with this particle can have non-first person subjects as well. Consider example (107):

(107) Yedu b-ˢoƛ'-ān-da/*b-ˢoƛ'-as-da.
DEM.nI.ABS(.III) III-fall-FUT.DEF-HYP III-fall-FUT-HYP
'This thing may fall down.' ('This thing will maybe fall down.')

In the following sentence, the lative argument is first person, so the future definite tense is warranted. The particle *–da* adds the same hypothetical reading to the sentence as in (107).

(108) Sis neła-r-no kur-no sis-kin dä-r
one DEM.nI-LAT-and throw-PFV.CVB one-FOC 1SG-LAT
ƛex-ān-da/*ƛex-as-da.
remain-FUT.DEF-HYP/remain-FUT-HYP
'I will throw it one (chick), and maybe I will have at least one left.'
(Debeq ža äsirus haqu yoč'ik'oƛ:10)

The particle can also occur in negative future sentences; in those sentences, 'maybe' takes scope over negation, as indicated by the example below:

(109) Yedu b-ˢoƛ'-āčin-da.
DEM.nI.ABS(.III) III-fall-FUT.DEF.NEG-HYP
'Maybe this thing will not fall down.'
NOT: 'This thing is not likely to fall down.' (it is not the case that this thing may fall down)

The particle *-da* does not necessarily appear on the predicate; it can also follow a different constituent, as in (113) and (114). In that case, it still takes scope over the entire clause; compare (107) and (109) with the following examples:

(110) Yedu-da b-ˢoƛ'-ān.
DEM.nI.ABS(.III)-HYP III-fall-FUT.DEF
'This thing will maybe fall down.'
(111) Yedu-da b-ˢoƛ'-āčin.
DEM.nI.ABS(.III)-HYP III-fall-FUT.DEF.NEG
'Maybe this thing will not fall down.'

The particle *–da* can only appear once in a clause, so the following sentence is ungrammatical:

(112) *Yedu-da b-ˢoƛ'-ān-da.
DEM.nI.ABS(.III)-HYP III-fall-FUT.DEF-HYP
('This thing will maybe fall down.')

Finally, as examples (113) and (114) show, the particle *–da* often co-occurs with expressions that bear the focus particle *–kin.* In textual examples, the majority of sentences where *–da* occurs also

include a *kin*-marked expression, and *–da* can attach to that expression, following *–kin.* For example:[7]

(113) Nesi-q-kin-da dey kid y-uy-xo-r
DEM.I-POSS.ESS-FOC-HYP 1SG.GEN1 girl.ABS.II II-true-AD-LAT
y-ut-ān?
II-turn-FUT.DEF
'What if he is the one that is able to turn my daughter back?'
(Xanes łˢono užin, sis kidno:90)

(114) R-ac'-a šebin-kin-da t'o teł r-esʷ-ān!
IV-eat.TR-INF thing.ABS.IV-FOC-HYP there inside IV-find-FUT.DEF
'What if there is something to eat inside!' (Zirun, ɣˢʷadin:41)

4.5 –xa

This enclitic is an Avar loan; in Avar it has an emphatic function, indicating that the speaker has a strong commitment to or investment in a given eventuality. The same epistemic commitment, which signals that the speaker has enough evidence to be sure about the proposition in question, is carried over to Tsez. Most commonly, *-xa* occurs on finite verbs and interjections, but it can also occur on other clausal constituents, in which case it still takes scope over the entire clause. The next example shows the variable positions of *–xa:*

(115) a. Ele-xa, ža Oǧoyo di yoł.
here-EMPH DEM Oxoyo.ABS.I 1SG.ABS(.I) be.PRS
b. Ele ža Oǧoyo di yoł-xa.
here DEM Oxoyo.ABS.I 1SG.ABS(.I) be.PRS-EMPH
'So, I am that very Oxoyo.' (based on Oǧoyo:13)

The particle is mentioned in Imnajšvili (1963) and is also used in Hinuq, likewise as a borrowing from Avar (Forker 2013: 425-426), but it is not widely used in Tsez.

5 The vocative particle *–yu*

The particle *–yu* is a vocative marker, mainly used with kinship terms; it combines with the oblique stem of the corresponding noun; for example:

(116) Lē, kid-be-yu!
hey girl-OS-VOC
'Hey, girl/daughter!'

(117) Uži-za-yu!
boy-OS.PL-VOC
'Boys/Sons!'

(118) Lē, xedi-yu (< xedi-y-yu)
hey husband-VOC husband-OS-VOC

[7] If asked to modify such examples, speakers allow the placement of *–da* on the verb, so this is clearly possible, but the tendency to combine *–kin* and *–da* is apparent from the examples.

‘Hey, husband!’

6 The quotative particle *–ƛin*

We gloss the particle *–ƛin* uniformly as a quotative marker, but as the discussion below shows, its functions actually vary between that of a quotative marker and a generalized complementizer. This particle is extremely frequent, as numerous examples throughout this grammar show. Diachronically, it is probably derived from the unwitnessed past form of the verb *eƛ-* ‘say’ (*eƛin*), which appears as the matrix verb in (119) below. As a genuine quotative, this particle marks reported speech, appearing on the last word of the quoted material, regardless of the word order of the clause:

(119) Y-eže-ni esi-y-ä eƛi-n … nāzon debe-z
II-young-DEF sibling-OS-ERG say-PST.nWIT all.OBL 2SG-GEN2
nukar-za-z gulu-za-ƛ’ ƛ’iri kur-ani-x
bodyguard-OS.PL-GEN2 horse-OS.PL-SUPER.ESS above throw-MASD-AD.ESS
xaliča-bi r-iš-ān di-ƛin.
rug-PL.ABS.nIPL nIPL-weave-FUT.DEF 1SG.ERG-QUOT
‘The younger sister said, … ‘I will be weaving saddle covers for all your bodyguards.’ (Beqes ʕUneyzat:19)

The quotative can appear multiple times, usually on the first and last word of a direct quotation, for example:

(120) Šebi-ƛin debe-r r-eti-x-ä-ƛin nes-ä
what.ABS.IV-QUOT 2SG-LAT IV-want-PRS-INTERR-QUOT DEM.I-ERG
esir-si.
ask-PST.WIT
‘ “What do you want?” asked he.’

As an extension of its quotative function, *–ƛin* marks proper nouns when they are introduced as names of people, places, or things, as in the following example, where the characters all have silly names.[8]

(121) Sida ʕomoy-ä eƛi-n dä-ƛ’ ci Ħišo-ƛin
one.OBL donkey-ERG say-PST.nWIT 1SG-SUPER.ESS name.ABS.III Close-QUOT
yoł-ƛin, side-n-ä-gon ʕAbdal yoł-ƛin,
be.PRS-QUOT one.OBL-DEF-ERG-ADD Idiot be.PRS-QUOT
łˤora-äƛir-ä-gon Qˤaƛu-ƛin yoł-ƛin.
three.OBL-ORD-ERG-ADD Shouting-QUOT be.PRS-QUOT
‘One donkey said, “My name is Shut,” the other donkey said, “My name is Idiot,” and the third one said, “My name is Shouter.” ’ (Sis boc’i, łˤono ʕomoyn:9)

In addition to its quotative function, *-ƛin* is also used as a genuine complementizer introducing

[8] Note that one of the names appears without the quotative marker, which confirms that it is optional in this function.

finite complement clauses. The differences between its use as a quotative and complementizer are discussed in CH.YY [Clausal complements].

Finally, this particle is used to mark purpose clauses with the predicate in the future definite tense. This use of the future definite is not restricted to first person subjects, as the following example shows:

(122) Ža gagali b-et'-ur-ān-ƛin raład-yo-z
DEM flower.ABS.III III-tear.away-CAUS-FUT.DEF-QUOT sea-OS-GEN2
lil-yo-xar y-ik'i-n ža-s eniw.
shore-OS-AD.VERS II-go-PST.nWIT boy-GEN1 mother.ABS.II
'The boy's mother went to the seashore to pick that flower.' (Eniwn, łˢonon kidno:35)

Purpose clauses can also have a masdar predicate, and *–ƛin* can attach to those as well; in such instances it is optional:

(123) Nes-ä daru b-is-si [unto-de dandir
DEM.I-ERG medicine.ABS.III III-take-PST.WIT sickness-APUD.ESS against
ħaƛ-ani-x-(ƛin)].
drink-MASD-AD.ESS-QUOT
'He bought a medication to take against sickness.'

In summary, the particle *–ƛin* has three main functions, which may all be related: marking direct quotation, appearing as a complementizer on finite embedded clauses, and marking purpose clauses by attaching to the predicate in the future or masdar form.

7 The particle *–ƛax*

The particle *–ƛax* is probably a frozen present tense form of the verb *eƛ-* 'say' (Imnajšvili 1963:274), but unlike the related *–ƛin,* which also derives from that verb, it is not a quotative marker in the proper sense. It occurs primarily with verbs in the unwitnessed past, to emphasize the indirect, non-evidential nature of the information conveyed by the verb. Thus, it serves as a marker of an indirect evidential. Typical fairy tale openers have a verb marked with *–ƛax*, for example:

(124) Zow-n-ƛax zow-n-ānu-ƛax sis
be.PST.nWIT-INDIRECT.EVID be.PST.nWIT-NEG- IND.EVID one
ɣˢana-xediw.
wife-husband.ABS.IPL
'Once upon a time there lived a married couple.' (Beqes ʕUneyzat:1)

In the following example, which is not formulaic, the non-evidential interpretation contributed by the particle is more apparent:

(125) Č'uħaraw šeƛ'u-n šeƛ'un idu-z-ā,
luxurious clothes.ABS.IV-and put.on-PFV.CVB home-DISTAL-IN.ESS
mada-za-x Ø-aħna-Ø-ik'i-x yoł-ƛax xan.

outside-OS.PL-AD.ESS I-walk-I-go-IPFV.CVB AUX.PRS-IND.EVID king.ABS.I
‘The king put on his royal robes and apparently went back and forth around the house and outside.’ (Beqes ʕUneyzat:43)

Word order and information structure

1 Head-final properties

Tsez has a number of properties characteristic of head-final languages. Its noun phrases, adverbial phrases, adjectival phrases, relative clauses, converbal clauses, masdar clauses, and infinitival clauses are all head-final. The language is strictly postpositional. All other factors being equal, the auxiliary follows the lexical verb, and in complex verbs, the non-verbal constituent (noun, adverb, or other) precedes the light verb. Interrogative markers are suffixal, as are negation and causative marking; however, agreement with the absolutive is marked with a prefix. Coordination is expressed by the enclitic *–n(o)* attached to each of the conjoined expressions. The order of personal names and surnames in Tsez is also typical of head-final languages: surname first, with the personal (first) name appearing in the final position. In traditional Tsez names, the closest equivalent to a surname is either the father's name in the genitive, as in (1a), or the name of the clan (*tuqum*), also in the genitive, as shown in (1b). In such instances, the order surname >> personal name naturally follows from the order adnominal genitive >> head noun. However, even if a surname is foreign and is not represented as genitive, the same order is maintained, as shown in (2).

(1) a. Paxrudin-e-s Ayšat
Paxruddin-OS-GEN1 Ayshat
'Ayshat, Paxruddin's daughter'
b. Budum-za-s Abakar
Budum-OS.PL-GEN1 Abakar
'Abakar from the Budum clan'

(2) a. Puškin Aleksandar
'Alexander Pushkin'
b. Yašin Lew
'Lev Yashin'

Names also precede titles; for example:

(3) a. Maħama reyun-yo-s bet'er
Mohammed district-OS-GEN1 master
'Head of District Administration Mohammed'
b. Raziyat doxtur
Raziyat doctor
'Doctor Raziyat'
c. c'aq'aw Suleyman xan
magnificent Suleiman king
'Sultan Suleiman the Magnificent'

For the order of constituents inside a noun phrase, see CH.YY [Noun phrase]. For adverb and adverbial clause placement tendencies, see CH. YY [Adverbial phrase] and CH.YY [Adverbial clauses] respectively.

2 Word order in root clauses: A brief overview

As we already noted, dependent clauses are strictly head-final. Despite the heavy clustering of prominent head-final properties, however, root clauses in Tsez are not rigidly verb-final, and there is some flexibility in the preverbal/postverbal area. There is no difference between declarative, interrogative, and exclamative clauses with respect to word order.

As a head-final language, Tsez does not have many verb-initial orders, but such orders are not impossible. VS structures are regularly observed in story openers, even with wh-words, which are otherwise unacceptable in this context (see CH. YY [Interrogatives]):

(4) Esi-n šebi, xeci-n šebi…
say-PST.nWIT what leave-PST.nWIT what
'Once upon a time'/ 'What should I tell…'

(5) Zow-n-ƛax sis c'odoraw xan.
be.PST-PST.nWIT one rich king.ABS.I
'There lived a rich king.'

Beyond these story-openers, the VS or VO order can be understood as a side effect of argument drop. Tsez allows argument drop for subjects and objects, leading to the appearance of verb-initiality. For example, in (6), the subject is omitted and the sentence has (apparent) verb-initial order. In (7), if the object's referent of the object is clear from the context, the object itself can be dropped; the subject appears postverbally (we will return to this point in section 3), and the whole sentence again has a verb-initial surface order:

(6) *pro* b-egir-si huni-x ƛirba-bi.
IPL-send-PST.WIT road-AD.ESS guest-PL.ABS(.IPL)
'(She/He/They) sent the guests on their way.'

(7) *pro* r-egir-si nes-ä.
IV-send-PST.WIT DEM.I-ERG
'He sent (it).'

In a similar vein, presentational constructions, which usually have the order scene-setting expression >> predicate >> subject, as in (8a), may omit the scene-setting expression, again yielding the appearance of verb-initial order, as in (8b):

(8) a. Id-āz-ay b-oƛi-x qaci-s gulu.
home-DIST-IN.ABL III-appear-PRS wood-GEN1 horse.ABS.III
'Out of the house appeared a wooden horse.'

b. B-oƛi-x qaci-s gulu.
III-appear-PRS wood-GEN1 horse.ABS.III
'A wooden horse appeared.'

Despite relatively free word order in root clauses, there are certain constructions where word order plays a disambiguating role. First, in existential and possessive clauses, the order of the existential pivot and scene-setting expression or possessor affects the interpretation. If a clause is interpreted as existential or possessive, the pivot has to precede the verb and follow the scene-

setting expression / possessor. For example, (9) has an existential interpretation, but (10) can be interpreted only as a statement about location (see also CH.YY [Basic clause types]).

(9) K'emot-y-ä kid zow-s.
trunk-OS-IN.ESS girl.ABS.II be.PST-PST.WIT
'There was a girl in the trunk.'

(10) Kid k'emot-y-ä zow-s.
girl.ABS.II trunk-OS-IN.ESS be.PST-PST.WIT
'A/The girl was in the trunk.'
NOT: 'There was a girl in the trunk.'

The sentence in (11) is a possessive clause, but (12) is a copular clause with the genitive appearing as a predicative nominal:

(11) Kid-be-s k'et'u zow-s.
girl-OS-GEN1 cat.ABS.III be.PST-PST.WIT
'A/the girl had a cat.'

(12) K'et'u kid-be-s zow-s.
cat.ABS.III girl-OS-GEN1 be.PST-PST.WIT
'The cat belongs to the girl.' (lit.: is girl's)
NOT: 'A/the girl had a cat.'

Another clausal domain where word order plays a disambiguating role is in polyvalent causatives, which may include multiple poss-essive noun phrases. Consider (13), which in principle has two interpretations, with Sultan or the girl interpreted as the causee. Word order is used to resolve this ambiguity: the first poss-essive is always interpreted as the causee (see also CH.YY [Basic clause types] for more discussion):

(13) a. Učitel-ä sult'an-qo kid-be-q
teacher-ERG Sultan-POSS.ESS girl-OS-POSS.ESS
sual bič'zi b-oy-er-si.
question.ABS.III understand III-do-CAUS-PST.WIT
'The teacher made Sultan explain the question to the girl.'

b. Učitel-ä kid-be-q sult'an-qo
teacher-ERG girl-OS-POSS.ESS Sultan-POSS.ESS
sual bič'zi b-oy-er-si.
question.ABS.III understand III-do-CAUS-PST.WIT
'The teacher made the girl explain the question to Sultan.'

Word order also plays a role in the interpretation of ditransitives. Tsez does not have a double object construction, and in ditransitives, the theme appears in the absolutive and the recipient/goal in the lative, poss-essive or poss-lative. All other factors being equal, the order recipient >> theme >> predicate leads to an English double-object-like interpretation, while the order theme >> recipient >> predicate is associated with an English dative-like interpretation. Compare:

(14) a. Nes-ä uži-q ʕaq'lu moˤɬ-si.
DEM.I-ERG boy-POSS.ESS advice.ABS.III teach-PST.WIT
'He gave the boy advice.'
b. Nes-ä ʕaq'lu uži-q moˤɬ-si.
DEM.I-ERG advice.ABS.III boy-POSS.ESS teach-PST.WIT
'He gave advice to the boy.'

Since root clauses are also located postverbally, in the position typically associated with given/backgrounded information (see section 3 below), the placement of one of the objects after the verb allows speakers to manipulate interpretation in predictable ways. Thus, (15a) is close to (14a) in interpretation, and (15b) is like (14b).

(15) a. Nes-ä ʕaq'lu moˤɬ-si uži-q.
DEM.I-ERG advice.ABS.III teach-PST.WIT boy-POSS.ESS
'He gave the boy advice.'
b. Nes-ä uži-q moˤɬ-si ʕaq'lu.
DEM.I-ERG boy-POSS.ESS teach-PST.WIT advice.ABS.III
'He gave advice to the boy.'

The word order generalizations presented here are strong tendencies, not ironclad rules, and they are sensitive to such properties of constituents as specificity (referentiality), information-structural status, and weight. In the next two sections we will explore word order in the postverbal and preverbal domains.

3 Postverbal domain (root clauses only)

To explore the differences between verb-final clauses and verb-medial clauses, let us first consider the following minimal pair:

(16) a. Däz esi-yä bercinaw ged y-is-si.
1SG.GEN2 mother-ERG beautiful dress.ABS.II II-take-PST.WIT
b. Bercinaw ged y-is-si däz esi-yä.
beautiful dress.ABS.II II-take-PST.WIT 1SG.GEN2 mother-ERG
'My mother bought a beautiful dress.'

The prosodic contours of these sentences are shown in the figures below.

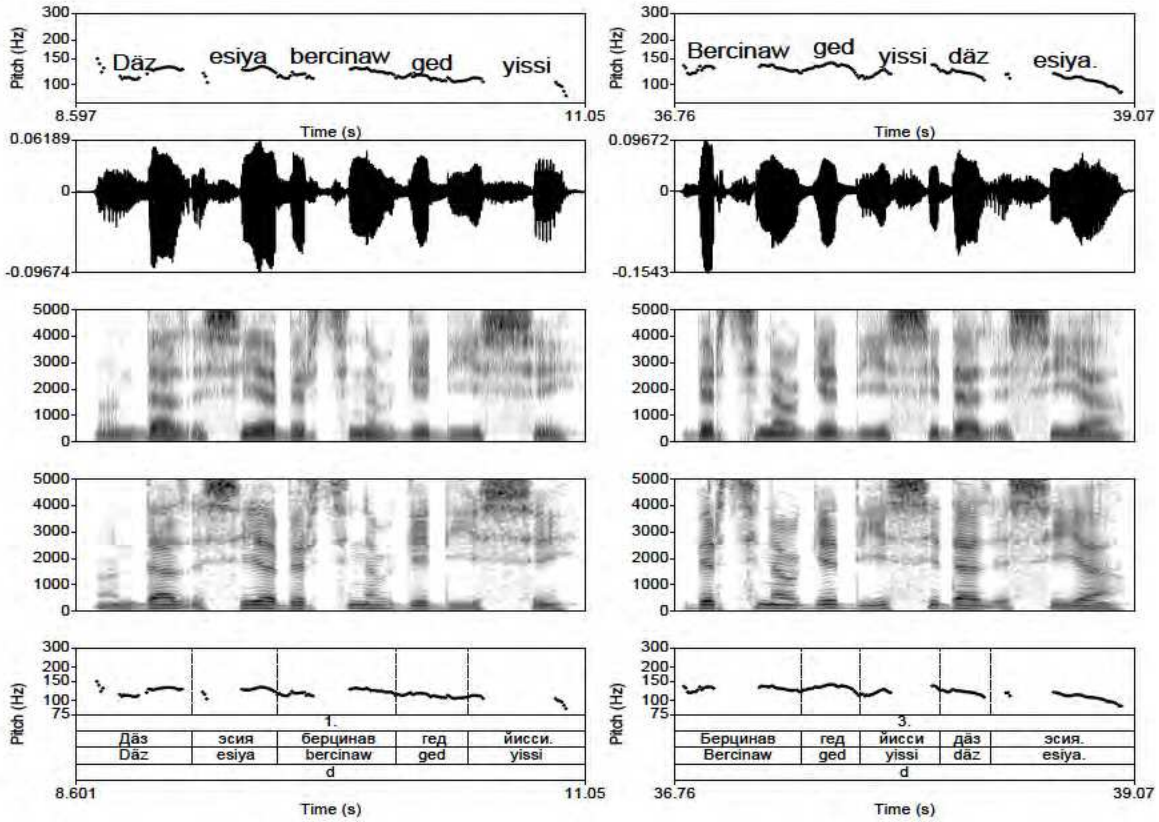

Figure 1. Prosodic contours: verb-final and verb-medial declarative clauses.

The two sentences share a similar falling contour. Furthermore, the first constituent (subject or object) of each clause receives prominence, with a peak on the head of the constituent (*esiyä* in (a) and *ged* in (b)). In both examples, the last slot is also prosodically prominent. However, the contour in the postverbal domain is slightly higher, and there is longer break between the predicate and the postverbal DP. Additionally, there is a secondary fall on the predicate in (16b), which suggests that *yissi* in (16a) is in some kind of a default (unmarked stress) position. These

prosodic observations are preliminary, and more work is needed to explore the differences between verb-final and verb-medial structures in Tsez and related languages. In the remainder of this section we will concentrate on structural properties of the postverbal domain.

As long as a clause is not embedded, postverbal material is possible in all types of sentences: declarative, interrogative, or exclamative. Negation on the matrix predicate does not prevent the appearance of postverbal material. Some examples:

(17) Xizzo y-ok'eł-si nesi-d-äy.
then II-escape-PST.WIT DEM.I-APUD-ABL
'Then I finally escaped from my marriage to him.'

(18) ʕezeʕan č'ič'iru zow-nč'-ä ža?
extremely vigorous be.PST-PST.nWIT.NEG-INTERR DEM.ABS(I)
'Wasn't he in extremely good health?'

(19) Hemece-wa Ø-ˢeže yoł Sult'an dā-ƛ'-āy!
so-EXCL I-big be.PRS Sultan.ABS.I 1SG-SUPER-ABL
'Sultan is so much older than me!'

(20) Kid-ba-bi bat'iyaw žuka ānu dä-q.
girl-OS-PL.ABS.nIPL other bad be.PRS.NEG 1SG-POSS.ESS
'My daughters are good.' (lit: I don't have other bad girls)

Despite the relative flexibility of the material appearing in the postverbal position, some restrictions apply. The first has to do with the referential (specific) nature of the postverbal material. Non-referential (non-specific) expressions cannot occur postverbally. This restriction means that existential and universal expressions, free choice or negative polarity items, and reflexives cannot follow the predicate. Compare the following minimal pairs:

(21) a. Šebi-ƛa žedu-qo-r r-oq-si.
what.ABS.IV-INDEF DEM.IPL-POSS-LAT IV-become-PST.WIT
'Something happened to them.'

b. *Žedu-qo-r r-oq-si šebi-ƛa.
DEM.IPL-POSS-LAT IV-become-PST.WIT what.ABS.IV-INDEF

(22) a. Nes-ä nāsin b-aƛ'ir-xosi yoł.
DEM.I-ERG all.ABS.IPL IPL-deceive-PRS.PTCP be.PRS
'He deceives everyone.'

b. *Nes-ä b-aƛ'ir-xosi yoł nāsin.
DEM.I-ERG IPL-deceive-PRS.PTCP be.PRS all.ABS.IPL

(23) a. Yiła kid-be-r sis-kin šebin k^{w}eze
DEM.nI.ATTR girl-OS-LAT one-FOC thing.ABS.IV meet
r-oq-x-ānu.
IV-become-PRS-NEG
'This girl will not get anything.' (Eynayru gurow išxosi anu:21)

b. *Yiła kid-be-r k^{w}eze r-oq-x-ānu
DEM.nI.ATTR girl-OS-LAT meet IV-become-PRS-NEG
sis-kin šebin.
one-FOC thing.ABS.IV

(24) a. ɣˢana-z-ä sis sida-r muri-bi teƛ-si.
woman-OS.PL-ERG RECP-LAT needle-PL.ABS.nIPL give-PST.WIT
'The women gave each other needles.'
b. *ɣˢana-z-ä muri-bi teƛ-si sis sida-r.
woman-OS.PL-ERG needle-PL.ABS.nIPL give-PST.WIT RECP-LAT

Furthermore, wh-words can only appear postverbally if they are part of an echo-question rather than a genuine information question. Compare the following examples, where (25b) can only be used if the speaker did not hear, or forgot, the name (see also CH. YY[Interrogatives]).

(25) a. Šebi debe-z babiw-ƛ'o ci (yoł-ä)?
what 2SG-GEN2 father-SUPER.ESS name.ABS.III be.PRS-INTERR
'What is your father's name?'
b. Debe-z babiw-ƛ'o ci (yoł-ä) šebi?
2SG-GEN2 father-SUPER.ESS name.ABS.III be.PRS-INTERR what
'Your father's name is WHAT?'
NOT: 'What is your father's name?'

In yes-no questions, where the interrogative marker can attach to almost any constituent or subconstituent of the question other than the predicate, such interrogative expressions must occur preverbally. Compare the following two examples. Example (26) is ambiguous between a genuine yes-no question concerning the truth of the proposition 'the one who is tired is Mother', and an exclamative. Example (27), on the other hand, cannot be interpreted as a question, because the non-predicate constituent that combines with the interrogative marker is postverbal; in this position, the questioned constituent must be non-focused, and hence incompatible with an interrogative reading. The utterance is unambiguously exclamative.

(26) Eniw-ä akił-no?/!
mother.ABS.II-INTERR get.tired-PST.nWIT
'Is it Mother that is tired?'
'Is Mother tired!'
(27) Akił-no eniw-ä!
get.tired-PST.nWIT mother-INTERR
'Is Mother tired!'

Overall, the expressions that cannot occur in the Tsez right periphery are those items that cannot be topics, either because they are referentially dependent on an antecedent (the way reflexives are), or because they are not under the presupposition of existence (as quantified expressions are).

Consistent with this generalization, we find that the material that actually occurs in the postverbal domain is associated with the topic interpretation. For instance, postverbal subjects are commonly expressed by pronouns or demonstratives, which are typical topics. In a hundred clauses of a dialogical text ("Ayshat'), we find 39 clauses with postverbal material, of which 25 have postposed pronouns or demonstratives. Pronouns and demonstratives are typical continuing

topics, and the right periphery seems to be a natural place for them.[1] In the same sample, we find that out of 39 postverbal constituents, 28 are subjects. The correlation between subjects and topics is well known, and these data are again consistent with an association between the postverbal domain and topichood. It is important to underscore that the postverbal position is not the *only* place where such topics can occur; nevertheless, it is certainly a common place for them in root clauses.

Additional support for the correlation between postverbal placement and topic interpretation comes from restrictions on focus-marked expressions. Setting aside contrastive material, topic and focus are mutually exclusive (see Bach 1972; Büring 1997; Lambrecht 1994; Erteschik-Shir 2007, a.o. for a detailed discussion). Assuming that the postverbal domain is topic-oriented, we can expect that focused material will be either impossible or severely restricted in this position. This expectation is borne out by the language data. Recall that there are two focus particles, *-kin* and *–tow*. Material with the particle *–kin* is unacceptable in the postverbal domain, thus:

(28) a. Es-na-bi halmaɣ-za-ƛ'-āy-kin b-ok'eł-si.
sibling-PL-PL.ABS(IPL) friend-OS.PL-SUPER-ABL-FOC IPL-tear.away-PST.WIT
'The brothers got separated even from their friends.'
b. #Es-na-bi b-ok'eł-si halmaɣ-za-ƛ'-āy-kin.
sibling-PL-PL.ABS(IPL) IPL-tear.away-PST.WIT friend-OS.PL-SUPER-ABL-FOC

The situation with the particle *–tow* is more nuanced. Generally, material marked with *–tow* is unacceptable or marginally acceptable postverbally. For instance, in the following example, *-tow*'s postverbal placement is dispreferred:

(29) a. Neł-ä aɣ-bi idu-tow xec-xosi (yoł).
DEM.nI-ERG bird-PL.ABS.nIPL at.home-FOC leave-PRS.PTCP be.PRS
'She keeps birds at home.'
b. #Neł-ä aɣ-bi xec-xosi (yoł) idu-tow.
DEM.nI-ERG bird-PL.ABS.nIPL leave-PRS.PTCP be.PRS at.home-FOC

However in addition to its work as a focus marker, *–tow* is also regularly used to indicate coreference between a pronoun/demonstrative and an antecedent, either in the same clause or across clauses (see CH. YY [Particles], CH.YY [Reflexives and anaphora], and CH.YY[Coordination]). In this function, the particle is fully acceptable postverbally; this discrepancy accounts for the contrast between regular demonstratives and pronouns, which can appear postverbally, and reflexives, which cannot, as shown in (30):

(30) a. Di dä-ƛ'o-r di y-ezu-s.
1SG.ABS(.II) 1SG.REFL.SUPER-LAT II-look-PST.WIT
'I (woman speaking) looked at myself.'
b. *Di y-ezu-s dä-ƛ'o-r di.
1SG.ABS(.II) II-look-PST.WIT 1SG.REFL.SUPER-LAT

[1] New topics, including topics which are introduced by the particle *–ƛa*, do not appear in the right periphery (see CH. YY[PART]).

(31) a. Di dä-ƛ'o-r-*(tow) y-ezu-s.
1SG.ABS(.II) 1SG-SUPER-LAT-FOC II-look-PST.WIT
'I (woman speaking) looked at myself.'
b. Di y-ezu-s dä-ƛ'o-r(-tow).
1SG.ABS(.II) II-look-PST.WIT 1SG-SUPER-LAT-FOC
'I (woman speaking) looked at myself.'

In (30b), the reflexive pronoun cannot appear postverbally because it does not have independent reference, and therefore does not meet the criteria for inclusion in the postverbal domain. A regular pronoun meets those criteria and can appear preverbally or postverbally, as in (31); in both placements, it can still be co-indexed with the subject. Note that the focus particle *–tow* is optional postverbally, whereas it is obligatory in the preverbal domain.

The postverbal domain can include more than one constituent; in such instances, the order of constituents is quite flexible, and we can only suggest some tendencies. The first tendency is a preference for placing the subject to the right of all other material; for example, although both (32a,b) are acceptable, there is a slight preference for (32a):[2]

(32) a. B-ay-si [armi-ł-āz-ay] [es-na-bi].
IPL-come-PST.WIT army-CONT-DISTAL-ABL sibling-PL-PL.ABS(.IPL)
b. B-ay-si [es-na-bi] [armi-ł-az-āy].
IPL-come-PST.WIT sibling-PL-PL.ABS(.IPL) army-CONT-DISTAL-ABL
'The brothers came back from serving in the army.'

The second tendency has to do with the size of constituents. In the postverbal domain, longer constituents tend to follow shorter ones, just as they do in familiar languages such as English. This preference often outweighs the subject-final preference. Consider the following examples. In (33), the subject demonstrative *že* is lighter (shorter) than the object, which appears last; likewise, in (34), a sizeable directional phrase, which includes a relative clause, follows the demonstrative subject.[3] In (35), there are three postverbal constituents; the adverbial precedes the subject, and the heavy object again appears last.

(33) Di y-ok'eł-xoy-tow esir-a Ø-ay-si
1SG.ABS(.II) II-tear.away-CAUSAL.II.CVB-FOC ask-INF I-come-PST.WIT
[že] [dä-z] [obi-z esiy-de-r].
DEM.ABS(.I) 1SG-GEN2 father-GEN2 sibling-APUD-LAT
'As soon as I was divorced from him, he went to ask for my father's sister's hand.'

(34) B-ay-n [yizi] [aziroy-n xalq'i-mo-ł-äy
IPL-come-PST.nWIT DEM.PL(.IPL) freeze-PFV.CVB people-OS-CONT-ABL
bero-bi r-äq-ru ħon-ƛ'o-r].
ice-PL.ABS.nIPL nIPL-become-PST.PTCP mountain-SUPER-LAT
'They went up to the mountain that was formed from frozen people.'

[2] Here and below, we use brackets to show the pertinent constituents.
[3] The heavy postverbal constituent in (34) is structurally complex, including a relative clause which in turn includes a converb. We do not mark this additional constituency with brackets.

(Beqes ʕUneyzat:219)

(35) Xizyo Ø-egiri-nč'u [maħo-r] [nes-ä] [uži-s muʕalim].
after I-send-PST.WIT.NEG outside-LAT DEM.I-ERG boy-GEN1 teacher.ABS.I
'After that, he did not let the son's teacher go outside.'

4 Preverbal domain

Preverbal placement is quite flexible but several generalizations emerge. We will first consider the position immediately before the verb. Any expression in that position, regardless of its constituent status, combines with the linking particle *–n(o)* if the clause in question is converbal, adjoined to another clause. See Ch. YY[Adverbial clauses] for details.

Negative polarity items tend to appear in the immediate preverbal position. Consider the following examples. In (37), there are two negative polarity items, the adverbial *netinkin* and the adnominal modifier *łinasnokin.*

(36) Neł-ä yisi-qo-r xabar-kin b-oy-n-ānu.
DEM.nI-ERG DEM.I-POSS-LAT conversation.ABS.III-FOC III-do-PST.nWIT-NEG
'It [=the dragon] would not talk to him.' (ʕAliqilič:59)

(37) Nes-ä neti-n-kin łina-s-no-kin pikru
DEM.I-ERG when-UNIV-FOC what-GEN1-UNIV-FOC thought.ABS.III
b-oy-xosi zow-s
III-do-PRS.PTCP be-PST.WIT
'He never paid any attention to anything.'

Adverbs on the other hand do not have a strong association with the preverbal position. They can appear in the middle field before the verb, at the beginning of the clause, or postverbally (see example (35) above). See Ch. YY [Adverbial phrase] for details.

In a reasonable number of head-final languages, the immediate preverbal position is associated with focus or new information (cf. Kiss 1998 for Hungarian; Lambrecht 1994 for a general discussion; Yamashita et al. 2011 for syntactic and processing considerations, and Testelec 1997: 267-271 for Nakh-Dagestanian languages). This association is rather weak in Tsez. Preverbal material can be in focus, but focus can also appear anywhere in the clause, and constituents with focus particles can appear anywhere in the preverbal domain. For example, the focus particles *–tow* and *–kin* can appear on any constituent, and that constituent does not have to move closer to the verb when it is overtly marked as focused.

(38) Debe-q-no hemedur-tow harizi r-oy-x di.
2SG-POSS.ESS-and so-FOC request IV-do-PRS 1SG.ERG
'I am asking you the same thing.' (Xanno, nesisgon łʕono užin:119)

(39) Hemedur-tow huni-x dandir c'äx-ru xalq'i-mo ħaʎu-n.
so-FOC road-AD.ESS across hit-PST.PTCP people-OS.ERG drink-PST.nWIT
'The people he met also drank (water) the same way.' (ʕAliqilič:60)

(40) Kid-b-ä nełä neła-s k'et'u iškola-ɣor-kin b-iž-s.
girl-OS-ERG REFL.nI-GEN1 cat.ABS.III school-IN.VERS-FOC III-lead-PST.WIT
'The girl took her cat TO SCHOOL.'

(41) Idu-kin xexbi q'ecenyay-x.
at.home-FOC chidren.ABS.PL argue-PRS
'Children argue AT HOME.'

Likewise, wh-words, which are focus elements, can but do not have to be preverbal or in the left clausal periphery. Consider some examples below and see CH.YY [Interrogatives] for more discussion:

(42) Yedu šebin neti dow-qo r-oq-ä?
DEM thing.ABS.IV when 2SG-POSS.ESS IV-become-PST.WIT.INTERR
'When did that happen to you?'

(43) Howži łina-s ħal debe-ƛ' (yoł)?
now what-GEN1 condition.ABS.III 2SG-POSS.ESS be.PRS
'What is weighing upon you now?'

(44) Žed-ä šebi istowli-ƛ' er-ä?
DEM.IPL-ERG what.ABS(.IV) table-SUPER.ESS put-PST.WIT.INTERR
'What did they put on the table?'

The placement of *šida* 'why' is an exception to this generalization; this interrogative expression tends to appear clause-initially.

(45) a. Šida yedu wˢał-er r-ešnad-a
why DEM.ABS(.IV) downward-LAT IV-drip-INF
r-oq-ä?
IV-become-PST.WIT.INTERR
'Why did it (=the roof) begin dripping water?' (ʕAliqilič:34)

b. ??Yedu wˢał-er šida r-ešnad-a
DEM.ABS(.IV) downward-LAT why IV-drip-INF
r-oq-ä?
IV-become-PST.WIT.INTERR

(46) a. Šida mi yaqˢuł-gon at'iw qaca
why 2SG.ERG today-CONTR.TOP wet firewood.ABS.IV
r-ay-r-ä?
IV-come-CAUS-PST.WIT.INTERR
'And today, why did you bring wet firewood?' (Onočun, mamalayn:5)

b. ??Mi yaqˢuł-gon šida at'iw qaca
2SG.ERG today-CONTR.TOP why wet firewood.ABS.IV
r-ay-r-ä?
IV-come-CAUS-PST.WIT.INTERR

c. ?? Mi yaqˢuł-gon at'iw qaca šida
2SG.ERG today-CONTR.TOP wet firewood.ABS.IV why
r-ay-r-ä?
IV-come-CAUS-PST.WIT.INTERR

Example (46a) illustrates yet another word order tendency: topic-marked constituents do not have to undergo displacement, but can appear in the middle field of a sentence, in a position

which can be characterized as *in situ*. The placement of *yaqˁułgon* illustrates this possibility. The examples below illustrate the same option for constituents marked with the particles *–yołi* and *-n(o)*:

(47) Žedu-r Ø-ukay-nč'i-z-ā-ɣor ža-yołi xexłiƛ'
DEM.IPL-LAT I-see-NEG-ATTR.OBL-IN-VERS DEM.ABS(.I)-CONTR.TOP quickly
Ø-ik'i-n.
I-go-PST.nWIT
'As for him, he quickly went to a place where they could not see him.'
(based on Hibos hunar:54)

(48) Nes-ä t'akan-y-ā-r b-äy-ru mesed-no
DEM.I-ERG glass-OS-IN-LAT III-come-PST.PTCP gold.ABS.III-TOP
ħiƛ'oq-a-x b-ut-ir-no.
handkerchief-OS-AD.ESS III-turn-CAUS-PST.nWIT
'The gold that appeared in the glass, he put inside a handkerchief.'
(based on Besurozaqu:17)

It seems that particle marking is sufficient and that Tsez feels no need to mark the information-structural status of a given constituent by word order. Topicalized adjuncts, however, do tend to be fronted (see also Polinsky and Potsdam 2001 for a discussion and syntactic analysis). This tendency of the language to front adjuncts — and note that it is only a tendency — is independent of these adjuncts' being marked with topic particles. For example, consider the near minimal pair below, where the adjunct may appear with or without a particle and is fronted in regardless.

(49) Žek'u-z ʕaƛ-ā-ɣor q'ʷarʕel-yo-ƛ' Ø-ik'i-n ža.
person-GEN2 village-IN-VERS need-OS-SUPER.ESS I-go-PST.nWIT DEM.ABS(.I)
'He went to another village out of need.'

(50) Ečru-ni ʕaƛ-ā-ɣor-gon yedu uži Ø-egir-si
old-DEF village-IN-VERS-CONTR.TOP DEM boy.ABS.I I-send-PST.WIT
babi-y-ä.
father-OS-ERG
'As to the old village, Father sent the boy there.'

The final generalization that we will discuss here has to do with the size (weight) of constituents. We noted that, postverbally, heavy constituents tend to follow lighter ones, thus instantiating a pattern that can be described as 'short-before-long'. In the preverbal domain, we find a mirror image of this principle, the 'long-before-short' effect; all factors being equal, long constituents appear further away from the verb. Compare examples (34) and (35) above and the preferred order of their constituents when they appear preverbally; in the corresponding examples (51) and (52), the long-before-short order is desirable:

(51) a. [Aziroy-n xalq'i-mo-ł-äy bero-bi
freeze-PFV.CVB people-OS-CONT-ABL ice-PL.ABS.nIPL
r-äq-ru ħon-ƛ'o-r] [yizi] b-ay-n.
nIPL-become-PST.PTCP mountain-SUPER-LAT DEM.PL(.IPL) IPL-come-PST.nWIT

b. ??[Yizi] [aziroy-n xalq'i-mo-ł-äy bero-bi
DEM.PL(.IPL) freeze-PFV.CVB people-OS-CONT-ABL ice-PL.ABS.nIPL
r-äq-ru ħon-ƛ'o-r] b-ay-n.
nIPL-become-PST.PTCP mountain-SUPER-LAT IPL-come-PST.nWIT
'They went up to the mountain that was formed from frozen people.'

(52) a. [Uži-s muʕalim] [maħo-r] Ø-egiri-nč'u nes-ä.
boy-GEN1 teacher.ABS.I outside-LAT I-send-PST.WIT.NEG DEM.I-ERG
b. ?[Maħo-r] [uži-s muʕalim] Ø-egiri-nč'u nes-ä.
outside-LAT boy-GEN1 teacher.ABS.I I-send-PST.WIT.NEG DEM.I-ERG
'He did not let the son's teacher go outside.'

Compare also the examples in (14a,b), where the subject and both objects are of equal weight, and the following example, where the longer constituent appears first:

(53) Dice ixiw ʕaq'lu nes-ä dä-q moʕł-ä!
how.much big advice.ABS.III DEM.I-ERG 1SG-POSS.ESS teach-PST.WIT.INTERR
'What great advice he gave me!' (Wasiyat:48)

The tendency to place long constituents before short ones is attested in other head-final languages (Yamashita and Chang 2001; Yamashita et al. 2011). Yamashita and Chang's (2001) main evidence for this tendency comes from Japanese, which is rigidly verb-final. At the end of their paper, they raise the question of word order in the postverbal domain, for those head-final languages that allow postverbal material. We can now weigh in on this debate with evidence from Tsez: in this language, the long-before-short preference in the preverbal domain is mirrored by a short-before-long preference postverbally. A similar combination of preferences is found in Basque (Erdocia et al. 2012) and Finnish (Mitchell 2012), which suggests that the tendencies are common and warrant further cross-linguistic examination.

Long constituents tend to express new information, which requires more detailed lexical specification. After all, if a referent has already been introduced, its identity is already known and one can refer to it using a short description, a demonstrative, or a pronoun (null or overt). Thus, "long" in the preverbal domain tends to mean "non-topical" — but it is typical of topical constituents to appear close to the beginning of a sentence, away from the verb. Therefore, the long-before-short preference may be at odds with the topic-before-focus preference, thus putting pressure on head-final languages. Inasmuch as these tendencies may be in conflict, Tsez is in an opportune position, for at least two reasons. First, as we just noted, Tsez topics are not required to displace to the left; they can stay in situ. Second, as we saw earlier in this chapter, light topics, which are hearer-old or discourse-old, commonly occur postverbally, thus leaving the preverbal domain for constituents that are comparable from an information-structural standpoint. As for hearer-new or discourse-new topics, which have just been introduced, inferred, or switched to (from a previous topic), they tend to be lexically specified (Gundel 1985; Gundel 1988; Gundel et al. 1993; Prince 1992; Lambrecht 1994), so their appearance in the initial position of an utterance meets both the need to put longer constituents before shorter ones (the need necessitated by head-final preferences) and the need to start an utterance with topic rather than comment.